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**WAGES AND HOURS OF LABOR  
IN THE IRON AND STEEL  
INDUSTRY: 1907 TO 1915**

**WITH A GLOSSARY  
OF OCCUPATIONS**



**OCTOBER, 1917**

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# BULLETIN OF THE U. S. BUREAU OF LABOR STATISTICS.

WHOLE NO. 218.

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OCTOBER, 1917

## WAGES AND HOURS OF LABOR IN THE IRON AND STEEL INDUSTRY, 1907 TO 1915.

### INTRODUCTION AND SUMMARY.

Rates of wages or earnings per hour, full-time hours per week, and full-time weekly earnings in 1913, 1914, and 1915 are presented in this report for 10 departments of the iron and steel industry in the United States, together with similar statistics for 1907 to 1912, repeated from Bulletins 151 and 168.

These statistics may be taken as fully representative of general conditions in the industry,<sup>1</sup> as they are based on reports from plants whose total tonnage capacity, *in each department covered*, is from 35 to 63 per cent of the total tonnage capacity of all plants in the United States.

The increases in *rates* of pay to both tonnage workers and time workers, which were general in this industry during the early part of 1913, were not affected by the period of depression extending from the summer of 1913 to the summer of 1915, but the *earnings* per hour of tonnage workers, and consequently their earnings per week, were materially decreased thereby, owing to the gradual slowing up which is almost unavoidable when a plant has little work ahead. This decrease in the earnings of tonnage workers reduced the combined full-time weekly earnings of tonnage workers and time workers in May, 1915, as compared with May, 1913, in blast-furnace plants 4 per cent, in Bessemer plants 10 per cent, in open-hearth plants 1 per cent, in blooming mills 5 per cent, in standard rail mills 3 per cent, in bar mills 4 per cent, and in sheet mills 5 per cent. The weekly earnings in plate mills were the same in 1915 as in 1913, while in tin-plate mills they were 3 per cent higher in 1915 than in 1913.

In May, 1915, as compared with May, 1914, full-time weekly earnings had increased from 1 to 5 per cent in Bessemer plants, open-hearth plants, plate mills, bar mills, and tin-plate mills; they were

<sup>1</sup> The figures of the general tables of this report end with May, 1915, and therefore do not show the phenomenal increase in rates and earnings during 1916 which are indicated by the data published on pages 10 to 14.

unchanged in blast-furnace plants and blooming mills, and had decreased from 2 to 7 per cent in puddling mills, standard rail mills, and sheet mills.

Full-time weekly earnings in May, 1915, were from 4 to 8 per cent higher than in May, 1907, in the three departments for which reports are made for nine years (blast furnace, Bessemer converting, and bar mill); and in all departments, excluding puddling mills, they were from 2 to 22 per cent higher than in May, 1910. These increases in full-time weekly earnings represent an even greater increase in average earnings per hour, as the average full-time hours per week had decreased in 1915 from 2 to 6 per cent as compared with 1907 in three departments, and from 1 to 6 per cent as compared with 1910 in seven departments. The hours in plate mills and tin-plate mills were the same in 1915 as in 1910. The facts above quoted are drawn from the tables of index numbers, pages 15 and 16.

Statistics are presented in this report for employees in—

Blast furnaces, 1907–1915.

Bessemer converters, 1907–1915.

Open-hearth furnaces, 1910–1915.

Puddling mills, 1914, 1915.

Blooming mills, 1910–1915.

Plate mills, 1910–1915.

Standard-rail mills, 1910–1915.

Bar mills, 1907–1915.

Sheet mills, 1910–1915.

Tin-plate mills, 1910–1915.

These statistics are based on actual pay-roll data for one pay-roll period in each year, in most cases the second half of May, but in a few instances, when conditions in May were not representative of the year, reports were taken for a normal period as near May as available.

#### **CONDITION MONTHLY, JULY, 1913, TO JUNE, 1915.**

The depressed condition existing in the several departments of the industry from July, 1913, to June, 1915, is very clearly depicted in the table given on page 9, in which index numbers show for each month of such period the per cent that the pay roll was of the estimated pay roll for full time and the per cent of the customary full-time turns that actually were worked.

The index numbers are computed from the figures in Table 10, where such basic figures are fully explained. The method of computing these index numbers is explained on pages 65 to 67. Referring to the table, the figures for blast furnaces for July, 1913, show that the aggregate pay roll in that month was 84 per cent of the estimated average monthly pay roll had the full equipment of all plants been running full time. The next column shows that 85 per cent of the customary turns of that particular month, July, actually were worked.

TABLE 1.—INDEX NUMBERS—VOLUME OF EMPLOYMENT, JULY, 1913, TO JUNE, 1915.

[Per cent pay roll was of estimated pay roll for full customary time as computed from actual pay rolls for broken time. Per cent turns actually worked were of full-time customary turns in the same month.]

| Year and month. | Blast furnaces. |        | Bessemer converters. |        | Open-hearth furnaces. |        | Puddling mills. |        | Blooming mills. |        |
|-----------------|-----------------|--------|----------------------|--------|-----------------------|--------|-----------------|--------|-----------------|--------|
|                 | Pay roll.       | Turns. | Pay roll.            | Turns. | Pay roll.             | Turns. | Pay roll.       | Turns. | Pay roll.       | Turns. |
| <b>1913.</b>    |                 |        |                      |        |                       |        |                 |        |                 |        |
| July.....       | 84              | 85     | 129                  | 96     | 85                    | 82     | 42              | 36     | 101             | 95     |
| August.....     | 84              | 84     | 131                  | 98     | 88                    | 83     | 58              | 49     | 100             | 97     |
| September.....  | 82              | 81     | 123                  | 98     | 85                    | 82     | 67              | 58     | 97              | 95     |
| October.....    | 81              | 78     | 116                  | 99     | 84                    | 77     | 74              | 61     | 96              | 93     |
| November.....   | 73              | 71     | 86                   | 88     | 71                    | 72     | 58              | 55     | 79              | 81     |
| December.....   | 67              | 59     | 68                   | 62     | 60                    | 59     | 56              | 54     | 67              | 66     |
| <b>1914.</b>    |                 |        |                      |        |                       |        |                 |        |                 |        |
| January.....    | 66              | 58     | 81                   | 73     | 66                    | 65     | 61              | 56     | 74              | 74     |
| February.....   | 62              | 65     | 95                   | 96     | 70                    | 75     | 67              | 71     | 81              | 88     |
| March.....      | 71              | 69     | 98                   | 94     | 81                    | 78     | 78              | 70     | 91              | 89     |
| April.....      | 66              | 68     | 82                   | 86     | 76                    | 76     | 70              | 70     | 81              | 80     |
| May.....        | 67              | 63     | 67                   | 76     | 72                    | 73     | 60              | 61     | 73              | 70     |
| June.....       | 61              | 58     | 71                   | 78     | 73                    | 73     | 58              | 58     | 77              | 76     |
| July.....       | 61              | 61     | 77                   | 83     | 72                    | 74     | 44              | 46     | 79              | 77     |
| August.....     | 62              | 62     | 73                   | 79     | 76                    | 75     | 57              | 62     | 81              | 82     |
| September.....  | 60              | 59     | 69                   | 80     | 70                    | 71     | 50              | 51     | 72              | 74     |
| October.....    | 56              | 55     | 65                   | 73     | 60                    | 59     | 42              | 39     | 66              | 67     |
| November.....   | 49              | 50     | 47                   | 57     | 49                    | 47     | 39              | 41     | 52              | 54     |
| December.....   | 47              | 45     | 51                   | 58     | 50                    | 51     | 41              | 40     | 58              | 58     |
| <b>1915.</b>    |                 |        |                      |        |                       |        |                 |        |                 |        |
| January.....    | 48              | 47     | 65                   | 71     | 56                    | 54     | 53              | 58     | 66              | 64     |
| February.....   | 47              | 56     | 73                   | 83     | 56                    | 60     | 52              | 61     | 65              | 71     |
| March.....      | 55              | 60     | 80                   | 84     | 71                    | 71     | 62              | 67     | 80              | 81     |
| April.....      | 55              | 63     | 75                   | 86     | 71                    | 75     | 55              | 61     | 82              | 84     |
| May.....        | 59              | 65     | 81                   | 93     | 77                    | 81     | 49              | 56     | 88              | 88     |
| June.....       | 61              | 70     | 85                   | 95     | 79                    | 82     | 59              | 65     | 88              | 88     |

  

| Year and month. | Plate mills. |        | Standard rail mills. |        | Bar mills. |        | Sheet mills. |        | Tin-plate mills. |        |
|-----------------|--------------|--------|----------------------|--------|------------|--------|--------------|--------|------------------|--------|
|                 | Pay roll.    | Turns. | Pay roll.            | Turns. | Pay roll.  | Turns. | Pay roll.    | Turns. | Pay roll.        | Turns. |
| <b>1913.</b>    |              |        |                      |        |            |        |              |        |                  |        |
| July.....       | 79           | 80     | 111                  | 94     | 79         | 74     | 69           | 73     | 70               | 67     |
| August.....     | 82           | 78     | 116                  | 99     | 84         | 84     | 76           | 79     | 74               | 74     |
| September.....  | 79           | 74     | 108                  | 97     | 87         | 87     | 71           | 75     | 81               | 85     |
| October.....    | 84           | 75     | 100                  | 91     | 87         | 79     | 77           | 77     | 85               | 80     |
| November.....   | 69           | 64     | 74                   | 75     | 68         | 71     | 62           | 68     | 66               | 69     |
| December.....   | 66           | 61     | 63                   | 58     | 59         | 61     | 56           | 55     | 67               | 62     |
| <b>1914.</b>    |              |        |                      |        |            |        |              |        |                  |        |
| January.....    | 61           | 54     | 53                   | 46     | 63         | 64     | 72           | 65     | 82               | 78     |
| February.....   | 67           | 73     | 62                   | 67     | 67         | 73     | 72           | 77     | 83               | 85     |
| March.....      | 64           | 63     | 71                   | 69     | 71         | 69     | 79           | 80     | 95               | 91     |
| April.....      | 67           | 68     | 75                   | 77     | 63         | 64     | 80           | 80     | 91               | 87     |
| May.....        | 59           | 58     | 77                   | 82     | 55         | 55     | 61           | 66     | 85               | 86     |
| June.....       | 63           | 64     | 72                   | 72     | 59         | 59     | 63           | 67     | 84               | 87     |
| July.....       | 62           | 63     | 75                   | 80     | 64         | 62     | 66           | 63     | 67               | 64     |
| August.....     | 59           | 59     | 62                   | 61     | 65         | 65     | 78           | 81     | 71               | 73     |
| September.....  | 55           | 58     | 61                   | 66     | 62         | 63     | 82           | 82     | 82               | 86     |
| October.....    | 42           | 39     | 54                   | 56     | 55         | 53     | 71           | 68     | 66               | 66     |
| November.....   | 37           | 38     | 38                   | 44     | 44         | 43     | 50           | 50     | 45               | 47     |
| December.....   | 35           | 35     | 43                   | 43     | 47         | 47     | 50           | 45     | 48               | 48     |
| <b>1915.</b>    |              |        |                      |        |            |        |              |        |                  |        |
| January.....    | 40           | 44     | 38                   | 43     | 54         | 53     | 60           | 57     | 66               | 68     |
| February.....   | 58           | 66     | 44                   | 57     | 54         | 57     | 64           | 66     | 75               | 79     |
| March.....      | 67           | 64     | 55                   | 57     | 61         | 57     | 79           | 70     | 81               | 75     |
| April.....      | 57           | 61     | 56                   | 60     | 63         | 63     | 71           | 72     | 83               | 85     |
| May.....        | 65           | 68     | 75                   | 85     | 63         | 64     | 61           | 59     | 77               | 80     |
| June.....       | 74           | 80     | 79                   | 83     | 68         | 69     | 66           | 62     | 78               | 81     |

## CHANGES IN EMPLOYMENT AND EARNINGS IN 1915 AND 1916.

The iron and steel industry was at the lowest ebb during the winter of 1914-15. An improvement in general conditions began in the late winter and continued quite steadily, month by month, until February, 1916, when the increased activities had assumed such proportions as to fully warrant the remarkable series of increases in rates of pay which has continued to the present time (December, 1916).<sup>1</sup>

The general tables of this report speak for one specific period in each year—the month of May—and therefore do not in any way reflect month to month changes; moreover, as the last figures of these tables are for May, 1915, the unusual increases in rates of pay referred to above are not suggested. However, the figures of Table 1 show the increasing activity in the several departments from the winter of 1914-15 to June, 1915, and the following tables, compiled from the issues of the MONTHLY REVIEW of this bureau, show the great increase in employment in the industry as a whole from January, 1915, to December, 1916. The phenomenal increases in rates made during 1916 are shown in the text statements below, which also are taken from issues of the MONTHLY REVIEW.

The plants furnishing information for the MONTHLY REVIEW on volume of employment are the same ones which furnished wages data published in the general tables of this report, but the figures in the monthly report cover entire establishments and are not limited to the 10 departments discussed in this report.

Table 2, below, shows the total number of employees on the half-monthly pay roll ending nearest the 15th of each month and the total amount of such pay roll in identical establishments reporting for the same month in 1915 and 1916, and also the per cent of increase in employees and pay-roll total in each month of 1916 as compared with the same month in 1915. Comparisons *can not* be made between succeeding months in this table because of changes in the number of establishments reporting.

The report for May, 1916, from 102 establishments shows 31.7 per cent more employees on the pay roll than in May, 1915, and an increase of 69.2 per cent in the amount of the pay roll, there being an increase in earnings of 28.5 per cent per capita in the 12 months.

In Table 3 is shown the number of employees at work on the last full-time day of each pay period reported and the per cent of increase on the stated day in each month of 1916 as compared with that day in the same month of 1915. Although some establishments did not furnish data for this table the per cent of increase in employees corresponds very closely with that in Table 2.

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<sup>1</sup> Later uncompiled data show other increases in rates of pay up to October, 1917.

TABLE 2.—COMPARISON OF EMPLOYMENT, AS SHOWN BY FIGURES FOR HALF-MONTH PAY PERIODS, 1915 AND 1916.

| Month.         | Number of establishments reporting. | Number of employees on one-half month pay roll in— |         | Per cent of increase in 1916. | Amount of one-half month pay roll in— |             | Per cent of increase in 1916. |
|----------------|-------------------------------------|----------------------------------------------------|---------|-------------------------------|---------------------------------------|-------------|-------------------------------|
|                |                                     | 1915                                               | 1916    |                               | 1915                                  | 1916        |                               |
| January.....   | 86                                  | 100,792                                            | 135,831 | 34.8                          | \$2,625,977                           | \$4,257,314 | 62.1                          |
| February.....  | 93                                  | 94,200                                             | 134,920 | 43.2                          | 2,737,536                             | 4,737,278   | 73.0                          |
| March.....     | 103                                 | 105,190                                            | 143,318 | 36.2                          | 3,223,996                             | 5,167,920   | 60.3                          |
| April.....     | 96                                  | 107,099                                            | 139,920 | 30.6                          | 3,312,324                             | 5,052,726   | 52.5                          |
| May.....       | 102                                 | 118,545                                            | 156,126 | 31.7                          | 3,572,210                             | 6,043,820   | 69.2                          |
| June.....      | 94                                  | 106,911                                            | 137,524 | 28.6                          | 3,396,861                             | 5,338,785   | 57.2                          |
| July.....      | 98                                  | 125,613                                            | 159,676 | 27.1                          | 3,597,452                             | 5,378,285   | 49.5                          |
| August.....    | 98                                  | 130,696                                            | 163,783 | 25.3                          | 4,076,274                             | 6,125,481   | 50.3                          |
| September..... | 100                                 | 140,545                                            | 173,533 | 23.5                          | 4,435,177                             | 6,669,870   | 50.4                          |
| October.....   | 92                                  | 130,071                                            | 154,418 | 18.7                          | 4,226,304                             | 6,283,242   | 48.7                          |
| November.....  | 97                                  | 128,091                                            | 154,496 | 20.6                          | 4,313,773                             | 6,065,891   | 40.6                          |
| December.....  | 95                                  | 132,951                                            | 162,709 | 22.4                          | 4,597,075                             | 6,554,472   | 42.6                          |

TABLE 3.—COMPARISON OF EMPLOYMENT, BY LAST DAY OF PAY PERIODS, IN 1915 AND 1916.

| Month.         | Number of establishments reporting. | Number of employees actually working on last full day of reported pay period in— |         | Per cent of increase in 1916. |
|----------------|-------------------------------------|----------------------------------------------------------------------------------|---------|-------------------------------|
|                |                                     | 1915                                                                             | 1916    |                               |
| January.....   | 83                                  | 85,730                                                                           | 118,549 | 38.3                          |
| February.....  | 90                                  | 78,026                                                                           | 113,112 | 45.0                          |
| March.....     | 85                                  | 81,546                                                                           | 112,575 | 37.9                          |
| April.....     | 76                                  | 86,025                                                                           | 108,582 | 26.2                          |
| May.....       | 87                                  | 92,954                                                                           | 123,526 | 32.9                          |
| June.....      | 81                                  | 86,444                                                                           | 111,527 | 29.0                          |
| July.....      | 82                                  | 99,269                                                                           | 124,797 | 25.7                          |
| August.....    | 83                                  | 104,788                                                                          | 128,618 | 22.7                          |
| September..... | 87                                  | 112,755                                                                          | 140,321 | 24.4                          |
| October.....   | 78                                  | 103,704                                                                          | 126,162 | 21.7                          |
| November.....  | 75                                  | 97,273                                                                           | 116,493 | 19.8                          |
| December.....  | 86                                  | 112,105                                                                          | 134,922 | 20.4                          |

Other figures published in the MONTHLY REVIEW show changes in volume of employment from month to month in identical plants, which plants vary in number as in the preceding tables. Index numbers have been computed for the iron and steel industry from the data available, with January, 1915, taken as the base, or 100. These index numbers indicate the percentage of increase or decrease in each succeeding month, as compared with January, 1915. Thus, the index of the number on the pay roll in December, 1916, was 160, indicating that the number on the pay roll was 160 per cent of the number on the pay roll in January, 1915, or an increase of 60 per cent in the number of persons on the pay roll. The amount of the pay roll in December, 1916, was 234 per cent of the amount of the pay roll in January, 1915.

These index numbers probably understate the per cent of increase, both in the number of employees and in the amount of wages paid in the industry, as the figures are based on reports made by plants that

were in operation in both 1915 and 1916. No account is taken of any plants from which no reports were received—that may have been shut down in the winter of 1914–15, and started up later in 1915 or in 1916.

TABLE 4.—INDEX NUMBERS OF EMPLOYEES ON THE PAY ROLL AND THE AMOUNT OF THE PAY ROLL EACH MONTH, 1915 AND 1916.

[January, 1915=100.]

| Year and month. | Number on pay roll. | Amount of pay roll. |
|-----------------|---------------------|---------------------|
| 1915.           |                     |                     |
| January.....    | 100                 | 100                 |
| February.....   | 96                  | 106                 |
| March.....      | 104                 | 116                 |
| April.....      | 108                 | 122                 |
| May.....        | 111                 | 120                 |
| June.....       | 115                 | 132                 |
| July.....       | 117                 | 121                 |
| August.....     | 121                 | 135                 |
| September.....  | 125                 | 140                 |
| October.....    | 130                 | 147                 |
| November.....   | 131                 | 159                 |
| December.....   | 130                 | 164                 |
| 1916.           |                     |                     |
| January.....    | 135                 | 162                 |
| February.....   | 138                 | 184                 |
| March.....      | 141                 | 186                 |
| April.....      | 141                 | 186                 |
| May.....        | 146                 | 204                 |
| June.....       | 147                 | 207                 |
| July.....       | 149                 | 181                 |
| August.....     | 152                 | 203                 |
| September.....  | 155                 | 211                 |
| October.....    | 155                 | 219                 |
| November.....   | 158                 | 224                 |
| December.....   | 160                 | 234                 |

The MONTHLY REVIEW for July, 1916, contains the following report as to changes in wage rates between May 1, 1915, and May 15, 1916:

Ninety-one of the 101 establishments in the iron and steel industry reporting announced increases in rates of wages since May 1, 1915; 10 only reported having made none. Seven other establishments reported as to volume of employment, but failed to answer this question. Of these 91, 83 increased wages in May, 1916, and for 71 of the 83 this was at least a second increase during the 13 months' period. One establishment reported having advanced its rates every 60 days, with aggregates of from 15 per cent to 30 per cent in the different departments. February, 1916, ranks next to May in increases, 38 establishments reporting advances during that month.

One-half the increases made were of 10 per cent each, with a range in the several increases of from 5 per cent to 30 per cent, aggregating 33 per cent in one establishment where there had been 3 separate advances. Forty-five establishments reported 2 increases of 10 per cent each. In nearly every case approximately all the employees of the establishments were affected by the increases, although 3 establishments reported that common labor only was benefited. These increases are not confined to any one district, but have been general in establishments in the Eastern, Middle Western, and Southern States.



The August REVIEW notes the changes in wage rates between May 15 and June 15, 1916:

More changes in wage rates were reported for the iron and steel industry than for any other. Twelve establishments reported increases as follows: Two per cent to a little over half the force in one establishment; 5 per cent on a few positions in two establishments; 5 per cent to a third of the force in one establishment; and 5 per cent to three-fourths of the force in another. One plant reported an increase of  $7\frac{1}{2}$  per cent to "labor" and another an increase of 5 to 10 per cent without specifying the proportion of force affected. A 10 per cent increase was made in one plant to the men in a single department, while another made a 10 per cent increase to 40 per cent of the force; 3 establishments reported an increase of 10 per cent to all employees. Fifty-two plants reported no change, and 34 failed to make a report. The reported increases were not confined to any particular locality.

The September REVIEW states:

The greatest number of increases in wages [during the month ending July 15] is reported for the iron and steel industry, where certain groups of employees or those in a selected occupation are reported as receiving increases of from 5 to 15 per cent; seven establishments report increases ranging between these figures.

The October REVIEW presenting information for the month ending August 15, states:

Three establishments report increases ranging from 5 to  $16\frac{2}{3}$  per cent to all employees. Twelve establishments report increases ranging from 5 to  $16\frac{2}{3}$  per cent to a part of the force, the high rate being reported in several cases for puddlers. One establishment reports an increase in rate to furnace men of 15 cents a day to 12-hour men and 10 cents a day to 10-hour men.

The November REVIEW states:

One establishment in this industry reports [for the month ending September 15] an increase of  $2\frac{1}{2}$  per cent to three-fourths of the force. Three establishments report an increase of 3 per cent to from one-half to three-fourths of the force. One establishment reports an increase of 5 per cent, but does not specify the class of employees receiving such increase. An increase of 10 per cent is reported by three establishments; in one of these establishments the increase is given to all employees, in another to three-fourths of the force, and in the third to a small percentage of the employees.

The December REVIEW states:

In the iron and steel industry there was an increase [in the month ending October 15] of from 3 to 5 per cent to all employees in 5 plants and an increase of 7 per cent to all in 6 plants. Six and one-tenth per cent increase to all is reported by 1 plant; another reports an increase of  $7\frac{1}{4}$  per cent to one-third of the force, and an increase of 5 per cent to the other two-thirds;  $7\frac{1}{4}$  per cent to one-fourth of the force and 5 per cent to the other three-fourths is reported by 1 establishment.

Two establishments report an increase of 10 per cent; in one case the 10 per cent increase is general, while in the other the proportion of the force receiving it is not stated.

The January (1917) REVIEW states:

In the iron and steel industry [for the month ending November 15] a 1 per cent increase to one-third of the force is reported by one establishment; an increase of  $2\frac{1}{2}$  per cent to tonnage men is reported by another establishment; while the same rate of increase is given to men covered by the amalgamated scale, about 20 per cent of the force, in still another establishment; and tonnage men get an increase of  $2\frac{3}{4}$  per cent in one establishment.

The February (1917) REVIEW states:

In the iron and steel industry [for the month ending December 15] one establishment reports an increase of 7 per cent, but does not state the proportion of the force receiving the same. An increase of 10 per cent to all employees is reported by two establishments; another applies the same rate of increase to the office force, while still another makes the same rate of increase apply to all but salaried people. One establishment gave a 10 per cent increase, but does not state the proportion of the force receiving the advance. In one blast furnace the entire force received an increase of 15 cents a day for 10-hour men and 25 cents a day for 12-hour men.

#### INDEX NUMBERS, BY DEPARTMENTS.

In the sections relating to the several departments the full-time weekly earnings, the full-time hours of labor per week, and the rates of wages or earnings per hour are shown for each group of occupations. These figures are summarized in the form of percentages, which show the trend of wages and hours from year to year in each department as a whole, and are assembled, for the convenience of the reader, in Table 5, below. The percentages (relative or index numbers) for each year previous to 1914 are based on a combination of the principal productive occupations only, in each department, but those for 1914 and 1915 are computed on data covering all occupations in each department, including the unclassified groups (see pp. 55 and 56) tabulated in this report for 1914 and 1915 for the first time.

The heavy-faced figures of the table following are relative or index numbers. These relative numbers are simply percentages computed from the actual weekly earnings, the actual hours of labor, and the actual rates of wages per hour appearing in the tables giving statistics by occupations in the several departments. In computing such index numbers the actual figures for 1915 are taken as the base, or 100 per cent; thus the facts for each preceding year are brought into direct comparison with the facts for the latest year available, namely, 1915. The relative for each year preceding 1915 is the per cent which the average in that year is of the average for 1915. For example, in Table 5, it is shown that the relative full-

time weekly earnings of employees in the principal productive occupations in blast furnaces in 1907 were 93 per cent of such weekly earnings in 1915. The weekly earnings decreased in 1908 to 88 per cent of the earnings in 1915, and in 1909 to 87 per cent. There was an increase to 94 in 1910, a one-point increase in 1911, and a similar decrease in 1912, followed by a marked increase in 1913, when the relative was 104, and a decrease to 100 in 1914, the same as in 1915. The relative numbers for full-time hours per week in blast furnaces decreased from 106 in 1907 to 100 in 1915—in other words, the average full-time hours of work per week in 1907 were 106 per cent of the average full-time hours in 1915. The other relative numbers of the table are read in like manner. The method of computing these relative numbers from the averages of the hours and wages shown in the several tables of this report is explained on pages 65 to 67.

TABLE 5.—RELATIVE FULL-TIME HOURS PER WEEK, WAGES PER HOUR, AND WEEKLY EARNINGS, TOGETHER WITH PER CENT OF INCREASE OR DECREASE, IN SPECIFIED YEARS, BY DEPARTMENTS.

[1915=100.]

| Department and year.         | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|------------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                              | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in— |                                                      |
|                              |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| <b>Blast furnaces:</b>       |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                    | 106                                | -6                                           | -----                                                | 88                               | +14                                          | -----                                                | 93                                  | + 8                                          | -----                                                |
| 1908.....                    | 104                                | -4                                           | -2                                                   | 84                               | +19                                          | - 5                                                  | 88                                  | +14                                          | - 5                                                  |
| 1909.....                    | 105                                | -5                                           | +1                                                   | 83                               | +20                                          | - 1                                                  | 87                                  | +15                                          | - 1                                                  |
| 1910.....                    | 106                                | -6                                           | +1                                                   | 89                               | +12                                          | + 7                                                  | 94                                  | + 6                                          | + 8                                                  |
| 1911.....                    | 105                                | -5                                           | -1                                                   | 91                               | +10                                          | + 2                                                  | 95                                  | + 5                                          | + 1                                                  |
| 1912.....                    | 102                                | -2                                           | -3                                                   | 93                               | + 8                                          | + 2                                                  | 94                                  | + 6                                          | - 1                                                  |
| 1913.....                    | 103                                | -3                                           | +1                                                   | 101                              | - 1                                          | + 9                                                  | 104                                 | - 4                                          | +11                                                  |
| 1914.....                    | 100                                | ( <sup>1</sup> )                             | -3                                                   | 100                              | ( <sup>1</sup> )                             | - 1                                                  | 100                                 | ( <sup>1</sup> )                             | - 4                                                  |
| 1915.....                    | 100                                | -----                                        | ( <sup>1</sup> )                                     | 100                              | -----                                        | ( <sup>1</sup> )                                     | 100                                 | -----                                        | ( <sup>1</sup> )                                     |
| <b>Bessemer converters:</b>  |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                    | 103                                | -3                                           | -----                                                | 95                               | + 5                                          | -----                                                | 96                                  | + 4                                          | -----                                                |
| 1908.....                    | 99                                 | +1                                           | -4                                                   | 89                               | +12                                          | - 6                                                  | 88                                  | +14                                          | - 8                                                  |
| 1909.....                    | 103                                | -3                                           | +4                                                   | 92                               | + 9                                          | + 3                                                  | 93                                  | + 8                                          | + 6                                                  |
| 1910.....                    | 103                                | -3                                           | ( <sup>1</sup> )                                     | 96                               | + 4                                          | + 4                                                  | 98                                  | + 2                                          | + 5                                                  |
| 1911.....                    | 101                                | -1                                           | -2                                                   | 92                               | + 9                                          | - 4                                                  | 93                                  | + 8                                          | - 5                                                  |
| 1912.....                    | 101                                | -1                                           | ( <sup>1</sup> )                                     | 102                              | - 2                                          | +11                                                  | 100                                 | ( <sup>1</sup> )                             | + 8                                                  |
| 1913.....                    | 100                                | ( <sup>1</sup> )                             | -1                                                   | 113                              | -12                                          | +11                                                  | 111                                 | -10                                          | +11                                                  |
| 1914.....                    | 100                                | ( <sup>1</sup> )                             | ( <sup>1</sup> )                                     | 97                               | + 3                                          | -14                                                  | 96                                  | + 4                                          | -14                                                  |
| 1915.....                    | 100                                | -----                                        | ( <sup>1</sup> )                                     | 100                              | -----                                        | + 3                                                  | 100                                 | -----                                        | + 4                                                  |
| <b>Open-hearth furnaces:</b> |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                    | 102                                | -2                                           | -----                                                | 86                               | +16                                          | -----                                                | 89                                  | +12                                          | -----                                                |
| 1911.....                    | 100                                | ( <sup>1</sup> )                             | -2                                                   | 86                               | +16                                          | ( <sup>1</sup> )                                     | 86                                  | +16                                          | - 3                                                  |
| 1912.....                    | 102                                | -2                                           | +2                                                   | 90                               | +11                                          | + 5                                                  | 91                                  | +10                                          | + 6                                                  |
| 1913.....                    | 103                                | -3                                           | +1                                                   | 98                               | + 2                                          | + 9                                                  | 101                                 | - 1                                          | +11                                                  |
| 1914.....                    | 100                                | ( <sup>1</sup> )                             | -3                                                   | 96                               | + 4                                          | - 2                                                  | 97                                  | + 3                                          | - 4                                                  |
| 1915.....                    | 100                                | -----                                        | ( <sup>1</sup> )                                     | 100                              | -----                                        | + 4                                                  | 100                                 | -----                                        | + 3                                                  |
| <b>Puddling mills:</b>       |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1914.....                    | 102                                | -2                                           | -----                                                | 104                              | - 4                                          | -----                                                | 105                                 | - 5                                          | -----                                                |
| 1915.....                    | 100                                | -----                                        | -2                                                   | 100                              | -----                                        | - 4                                                  | 100                                 | -----                                        | - 5                                                  |

<sup>1</sup> No change.

TABLE 5.—RELATIVE FULL-TIME HOURS PER WEEK, WAGES PER HOUR, AND WEEKLY EARNINGS, TOGETHER WITH PER CENT OF INCREASE OR DECREASE, IN SPECIFIED YEARS, BY DEPARTMENTS—Concluded.

†

| Department and year. | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|----------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                      | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in— |                                                      |
|                      |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| Bloomington mills:   |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....            | 102                                | -2                                           |                                                      | 88                               | +14                                          |                                                      | 89                                  | +12                                          |                                                      |
| 1911.....            | 101                                | -1                                           | -1                                                   | 89                               | +12                                          | +1                                                   | 90                                  | +11                                          | +1                                                   |
| 1912.....            | 101                                | -1                                           | (1)                                                  | 94                               | +6                                           | +6                                                   | 85                                  | +5                                           | +6                                                   |
| 1913.....            | 101                                | -1                                           | (1)                                                  | 105                              | -5                                           | +12                                                  | 105                                 | -5                                           | +11                                                  |
| 1914.....            | 99                                 | +1                                           | -2                                                   | 100                              | (1)                                          | -5                                                   | 100                                 | (1)                                          | -5                                                   |
| 1915.....            | 100                                |                                              | +1                                                   | 100                              |                                              | (1)                                                  | 100                                 |                                              | (1)                                                  |
| Plate mills:         |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....            | 100                                | (1)                                          |                                                      | 88                               | +14                                          |                                                      | 88                                  | +14                                          |                                                      |
| 1911.....            | 100                                | (1)                                          | (1)                                                  | 85                               | +18                                          | -3                                                   | 85                                  | +18                                          | -3                                                   |
| 1912.....            | 101                                | -1                                           | +1                                                   | 91                               | +10                                          | +7                                                   | 91                                  | +10                                          | +7                                                   |
| 1913.....            | 101                                | -1                                           | (1)                                                  | 99                               | +1                                           | +9                                                   | 100                                 | (1)                                          | +10                                                  |
| 1914.....            | 100                                | (1)                                          | -1                                                   | 95                               | +5                                           | -4                                                   | 95                                  | +5                                           | -5                                                   |
| 1915.....            | 100                                |                                              | (1)                                                  | 100                              |                                              | +5                                                   | 100                                 |                                              | +5                                                   |
| Standard rail mills: |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....            | 104                                | -4                                           |                                                      | 92                               | +9                                           |                                                      | 94                                  | +6                                           |                                                      |
| 1911.....            | 99                                 | +1                                           | -5                                                   | 92                               | +9                                           | (1)                                                  | 91                                  | +10                                          | -3                                                   |
| 1912.....            | 100                                | (1)                                          | +1                                                   | 93                               | +8                                           | +1                                                   | 92                                  | +9                                           | +1                                                   |
| 1913.....            | 100                                | (1)                                          | (1)                                                  | 103                              | -3                                           | +11                                                  | 103                                 | -3                                           | +12                                                  |
| 1914.....            | 99                                 | +1                                           | -1                                                   | 102                              | -2                                           | -1                                                   | 102                                 | -2                                           | -1                                                   |
| 1915.....            | 100                                |                                              | +1                                                   | 100                              |                                              | -2                                                   | 100                                 |                                              | -2                                                   |
| Bar mills:           |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....            | 102                                | -2                                           |                                                      | 95                               | +5                                           |                                                      | 96                                  | +4                                           |                                                      |
| 1908.....            | 101                                | -1                                           | -1                                                   | 86                               | +16                                          | -9                                                   | 86                                  | +16                                          | -10                                                  |
| 1909.....            | 102                                | -2                                           | +1                                                   | 87                               | +15                                          | +1                                                   | 88                                  | +14                                          | +2                                                   |
| 1910.....            | 102                                | -2                                           | (1)                                                  | 97                               | +3                                           | +11                                                  | 97                                  | +3                                           | +10                                                  |
| 1911.....            | 101                                | -1                                           | -1                                                   | 93                               | +8                                           | -4                                                   | 93                                  | +8                                           | -4                                                   |
| 1912.....            | 100                                | (1)                                          | -1                                                   | 94                               | +6                                           | +1                                                   | 94                                  | +6                                           | +1                                                   |
| 1913.....            | 100                                | (1)                                          | (1)                                                  | 104                              | -4                                           | +11                                                  | 104                                 | -4                                           | +11                                                  |
| 1914.....            | 101                                | -1                                           | +1                                                   | 99                               | +1                                           | -5                                                   | 99                                  | +1                                           | -5                                                   |
| 1915.....            | 100                                |                                              | -1                                                   | 100                              |                                              | +1                                                   | 100                                 |                                              | +1                                                   |
| Sheet mills:         |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....            | 101                                | -1                                           |                                                      | 91                               | +10                                          |                                                      | 91                                  | +10                                          |                                                      |
| 1911.....            | 99                                 | +1                                           | -2                                                   | 99                               | +1                                           | +9                                                   | 98                                  | +2                                           | +8                                                   |
| 1912.....            | 100                                | (1)                                          | +1                                                   | 102                              | -2                                           | +3                                                   | 101                                 | -1                                           | +3                                                   |
| 1913.....            | 100                                | (1)                                          | (1)                                                  | 106                              | -6                                           | +4                                                   | 105                                 | -5                                           | +4                                                   |
| 1914.....            | 100                                | (1)                                          | (1)                                                  | 108                              | -7                                           | +2                                                   | 108                                 | -7                                           | +3                                                   |
| 1915.....            | 100                                |                                              | (1)                                                  | 100                              |                                              | -7                                                   | 100                                 |                                              | -7                                                   |
| Tin-plate mills:     |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....            | 100                                | (1)                                          |                                                      | 82                               | +22                                          |                                                      | 82                                  | +22                                          |                                                      |
| 1911.....            | 100                                | (1)                                          | (1)                                                  | 92                               | +9                                           | +12                                                  | 92                                  | +9                                           | +12                                                  |
| 1912.....            | 100                                | (1)                                          | (1)                                                  | 93                               | +8                                           | +1                                                   | 93                                  | +8                                           | +1                                                   |
| 1913.....            | 100                                | (1)                                          | (1)                                                  | 96                               | +4                                           | +3                                                   | 97                                  | +3                                           | +4                                                   |
| 1914.....            | 100                                | (1)                                          | (1)                                                  | 98                               | +2                                           | +2                                                   | 99                                  | +1                                           | +2                                                   |
| 1915.....            | 100                                |                                              | (1)                                                  | 100                              |                                              | +2                                                   | 100                                 |                                              | +1                                                   |

† No change.

In addition to the relative numbers of this table, percentages have been computed showing the per cent of increase or decrease in 1915 as compared with each year preceding, and in each year compared with the year immediately preceding. Referring to the weekly earnings of blast-furnace employees in Table 5, it is seen that full-time weekly earnings in 1915 were 8 per cent higher than in

1907, 14 per cent higher than in 1908, etc. The next column shows that the weekly earnings of blast-furnace employees in 1908 were 5 per cent lower than in 1907, 1 per cent lower in 1909 than in 1908, 8 per cent higher in 1910 than in 1909, and so on. The percentages for hours per week and wages per hour for this department and for the other departments presented in the table are read in like manner.

#### **FULL-TIME WORKING DAYS PER WEEK.**

A blast furnace, from the nature of its process, must be in continuous operation day and night seven days per week. In 1907, in the 20 plants reported for that year, for 97 per cent of all employees in the occupations considered the customary working time per week was seven days, and for the remaining 3 per cent six days, but since 1910 there has been a material reduction in seven-day work, many plants having made provision to lay off each employee in rotation one day in seven, thus making a six-day week for the employee, while the plant is continuously in operation seven days.

Eighty-nine per cent of all the employees reported in blast-furnace operation, in 34 plants, worked seven days per week in 1911; 82 per cent, in 36 plants, worked a seven-day week in 1912 and 80 per cent in 1913; while only 58 per cent, in 38 plants, worked seven days per week in 1914 and only 59 per cent in 1915. The figures above embrace the principal productive occupations alone, but including the unclassified productive and nonproductive occupations which are tabulated for the first time for 1914 and 1915 (see pp. 55 and 56), the per cent of seven-day workers is further reduced to 53 per cent in 1914 and to 54 per cent in 1915. In 1915 42 per cent of all blast-furnace employees were down to a six-day-per-week basis.

The steel-making departments—Bessemer converters and open-hearth furnaces—usually are in operation day and night for six days per week, a shut-down being made over Sunday for a period varying from 12 to 36 hours. When the demand for production is heavy, however, the plants are operated seven days per week. In 1907, a year of large production, 24 per cent of the employees in the 9 Bessemer plants covered worked seven days per week. In the next two years the percentage was smaller. In 1910, another prosperous year, 34 per cent of the employees in the same 9 plants worked seven days per week. In 1913 only 11 per cent of the employees of the 10 plants covered worked seven days per week. Throughout the nine-year period the majority of the employees in the Bessemer converting department worked six days per week, while a few worked six and seven days in alternate weeks. The employees in open-hearth furnaces during the six years covered were as a whole about equally divided among the seven day, seven day and six day alternately, and the six day groups. In all rolling mills

the per cent of employees working seven days per week was very small.

The figures for all years covered in the ten departments appear in Table 6. The figures for the years grouped are strictly comparable as they represent identical plants. The inclusion of additional plants in the comparison of later years makes some differences in the percentages, as must be expected.

TABLE 6.—PER CENT OF EMPLOYEES IN EACH DEPARTMENT WORKING EACH SPECIFIED NUMBER OF DAYS PER WEEK, BY YEARS, 1907 TO 1915.

[The figures for each group of years are for identical plants. Two sets of figures are given for the plants reporting for 1914 and 1915, the first covering only the principal productive occupations in each department as shown for all the preceding groups of years, and therefore strictly comparable with them, and the second including also the unclassified occupations (see pp. 55 and 56) tabulated for 1914 and 1915 for the first time.]

| Department, and number of plants. | Year. | Per cent of employees whose customary working time per week was— |                                |                                         |                                         |         |                                |                                |                                         |                                         |                                         |
|-----------------------------------|-------|------------------------------------------------------------------|--------------------------------|-----------------------------------------|-----------------------------------------|---------|--------------------------------|--------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|
|                                   |       | 5 days.                                                          | 5 days and 6 days alternately. | 5 days, 5 days, and 6 days in rotation. | 5 days, 6 days, and 6 days in rotation. | 6 days. | 5 days and 7 days alternately. | 6 days and 7 days alternately. | 5 days, 6 days, and 7 days in rotation. | 6 days, 6 days, and 7 days in rotation. | 6 days, 7 days, and 7 days in rotation. |
| Blast furnaces:                   |       |                                                                  |                                |                                         |                                         |         |                                |                                |                                         |                                         |                                         |
| 20 plants.....                    | 1907  |                                                                  |                                |                                         |                                         | 3       |                                |                                |                                         |                                         | 97                                      |
|                                   | 1908  |                                                                  |                                |                                         |                                         | 5       |                                |                                |                                         |                                         | 95                                      |
|                                   | 1909  |                                                                  |                                |                                         |                                         | 3       |                                |                                |                                         |                                         | 97                                      |
|                                   | 1910  |                                                                  |                                |                                         |                                         | 5       |                                |                                |                                         |                                         | 95                                      |
| 34 plants.....                    | 1910  |                                                                  |                                |                                         |                                         | 5       |                                |                                |                                         |                                         | 95                                      |
|                                   | 1911  |                                                                  |                                |                                         |                                         | 11      |                                | (1)                            |                                         |                                         | 89                                      |
| 35 plants.....                    | 1911  |                                                                  |                                |                                         |                                         | 11      |                                | (1)                            |                                         |                                         | 89                                      |
|                                   | 1912  |                                                                  |                                |                                         |                                         | 18      |                                | (1)                            |                                         |                                         | 82                                      |
| 36 plants.....                    | 1912  |                                                                  |                                |                                         |                                         | 18      |                                | (1)                            |                                         |                                         | 82                                      |
|                                   | 1913  |                                                                  |                                |                                         |                                         | 20      |                                | (1)                            |                                         |                                         | 80                                      |
| 35 plants.....                    | 1913  |                                                                  |                                |                                         |                                         | 19      |                                |                                |                                         |                                         | 81                                      |
|                                   | 1914  |                                                                  |                                |                                         |                                         | 37      |                                | 5                              |                                         |                                         | 53                                      |
| 38 plants.....                    | 1914  |                                                                  |                                |                                         |                                         | 37      |                                | 5                              |                                         |                                         | 58                                      |
|                                   | 1915  |                                                                  |                                |                                         |                                         | 37      |                                | 4                              |                                         |                                         | 59                                      |
| 38 plants.....                    | 1914  |                                                                  |                                |                                         |                                         | 42      |                                | 5                              |                                         | (1)                                     | 53                                      |
|                                   | 1915  |                                                                  |                                |                                         |                                         | 42      |                                | 4                              |                                         | (1)                                     | 54                                      |
| Bessemer converters:              |       |                                                                  |                                |                                         |                                         |         |                                |                                |                                         |                                         |                                         |
| 9 plants.....                     | 1907  |                                                                  |                                |                                         |                                         | 61      | 13                             |                                |                                         | 1                                       | 24                                      |
|                                   | 1908  |                                                                  |                                |                                         |                                         | 69      | 10                             |                                |                                         | 2                                       | 19                                      |
|                                   | 1909  |                                                                  |                                |                                         |                                         | 62      | 14                             |                                |                                         | 1                                       | 22                                      |
|                                   | 1910  |                                                                  |                                |                                         |                                         | 56      | 4                              | 5                              |                                         | 1                                       | 34                                      |
| 10 plants.....                    | 1910  |                                                                  |                                |                                         |                                         | 58      | 4                              | 5                              |                                         | 1                                       | 32                                      |
|                                   | 1911  |                                                                  |                                |                                         |                                         | 77      | 6                              |                                |                                         | 2                                       | 15                                      |
| 10 plants.....                    | 1911  |                                                                  |                                |                                         |                                         | 77      | 6                              |                                |                                         | 2                                       | 15                                      |
|                                   | 1912  |                                                                  |                                |                                         |                                         | 69      | 14                             |                                |                                         | 1                                       | 15                                      |
| 10 plants.....                    | 1912  |                                                                  |                                |                                         |                                         | 69      | 13                             |                                |                                         | 2                                       | 16                                      |
|                                   | 1913  |                                                                  |                                |                                         |                                         | 73      | 10                             |                                |                                         | 5                                       | 11                                      |
| 10 plants.....                    | 1913  |                                                                  |                                |                                         |                                         | 75      | 9                              |                                |                                         | 5                                       | 12                                      |
|                                   | 1914  |                                                                  |                                |                                         |                                         | 78      | 3                              |                                |                                         | 5                                       | 14                                      |
| 12 plants.....                    | 1914  |                                                                  |                                |                                         |                                         | 81      | 2                              |                                |                                         | 5                                       | (1)                                     |
|                                   | 1915  |                                                                  |                                |                                         |                                         | 80      | 2                              |                                |                                         | 4                                       | 1                                       |
| 12 plants.....                    | 1914  |                                                                  |                                |                                         |                                         | 80      | 3                              |                                |                                         | 3                                       | (1)                                     |
|                                   | 1915  |                                                                  |                                |                                         |                                         | 80      | 3                              |                                |                                         | 3                                       | (1)                                     |

<sup>1</sup> Less than one-half of 1 per cent.

TABLE 6.—PER CENT OF EMPLOYEES IN EACH DEPARTMENT WORKING EACH SPECIFIED NUMBER OF DAYS PER WEEK, BY YEARS, 1907 TO 1915—Continued.

| Department, and number of plants. | Year. | Per cent of employees whose customary working time per week was— |                                |                                         |                                         |         |                                |                                |                                         |                                         |                                         |         |
|-----------------------------------|-------|------------------------------------------------------------------|--------------------------------|-----------------------------------------|-----------------------------------------|---------|--------------------------------|--------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|---------|
|                                   |       | 5 days.                                                          | 5 days and 6 days alternately. | 5 days, 5 days, and 6 days in rotation. | 5 days, 6 days, and 6 days in rotation. | 6 days. | 5 days and 7 days alternately. | 6 days and 7 days alternately. | 5 days, 6 days, and 7 days in rotation. | 6 days, 6 days, and 7 days in rotation. | 6 days, 7 days, and 7 days in rotation. | 7 days. |
| Open-hearth furnaces:             |       |                                                                  |                                |                                         |                                         |         |                                |                                |                                         |                                         |                                         |         |
| 17 plants.....                    | 1910  |                                                                  | 6                              |                                         |                                         | 34      | 1                              | 28                             |                                         |                                         |                                         | 32      |
|                                   | 1911  |                                                                  | 4                              |                                         |                                         | 45      | 1                              | 32                             |                                         | (1)                                     |                                         | 18      |
| 17 plants.....                    | 1911  |                                                                  | 4                              |                                         |                                         | 46      | 1                              | 32                             |                                         | (1)                                     |                                         | 18      |
|                                   | 1912  |                                                                  | 2                              |                                         |                                         | 36      |                                | 37                             |                                         | (1)                                     |                                         | 25      |
| 17 plants.....                    | 1912  |                                                                  | 2                              |                                         |                                         | 33      |                                | 36                             |                                         | 1                                       | (1)                                     | 29      |
|                                   | 1913  |                                                                  | 2                              |                                         |                                         | 28      |                                | 33                             |                                         | 2                                       |                                         | 34      |
| 17 plants.....                    | 1913  |                                                                  | 2                              |                                         |                                         | 26      |                                | 34                             |                                         | 1                                       | 1                                       | 35      |
|                                   | 1914  |                                                                  |                                |                                         |                                         | 34      |                                | 35                             |                                         | (1)                                     | (1)                                     | 30      |
| 22 plants.....                    | 1914  |                                                                  |                                |                                         |                                         | 33      |                                | 34                             |                                         | (1)                                     | (1)                                     | 31      |
|                                   | 1915  |                                                                  |                                |                                         |                                         | 34      |                                | 35                             |                                         |                                         |                                         | 32      |
| 22 plants.....                    | 1914  |                                                                  |                                |                                         |                                         | 39      |                                | 26                             |                                         | (1)                                     | (1)                                     | 34      |
|                                   | 1915  | (1)                                                              | (1)                            |                                         |                                         | 39      |                                | 27                             |                                         | (1)                                     | (1)                                     | 34      |
| Puddling mills:                   |       |                                                                  |                                |                                         |                                         |         |                                |                                |                                         |                                         |                                         |         |
| 29 plants.....                    | 1914  | 13                                                               | 66                             | 8                                       |                                         | 12      |                                | (1)                            |                                         |                                         |                                         | (1)     |
|                                   | 1915  | 25                                                               | 52                             | 12                                      |                                         | 11      |                                | (1)                            |                                         |                                         |                                         | (1)     |
| 29 plants.....                    | 1914  | 13                                                               | 63                             | 8                                       |                                         | 15      |                                | 1                              |                                         |                                         |                                         | 1       |
|                                   | 1915  | 24                                                               | 50                             | 11                                      |                                         | 13      |                                | 1                              |                                         |                                         |                                         | 1       |
| Blooming mills:                   |       |                                                                  |                                |                                         |                                         |         |                                |                                |                                         |                                         |                                         |         |
| 19 plants.....                    | 1910  |                                                                  | 7                              |                                         |                                         | 66      |                                | 10                             |                                         |                                         |                                         | 18      |
|                                   | 1911  | (1)                                                              | 6                              |                                         |                                         | 64      |                                | 15                             |                                         |                                         |                                         | 16      |
|                                   | 1912  | (1)                                                              | 5                              |                                         |                                         | 64      |                                | 15                             |                                         |                                         |                                         | 16      |
| 19 plants.....                    | 1912  | (1)                                                              | 5                              |                                         |                                         | 61      |                                | 10                             |                                         | 7                                       |                                         | 17      |
|                                   | 1913  | (1)                                                              | 5                              |                                         |                                         | 64      |                                | 12                             |                                         | 7                                       |                                         | 12      |
| 19 plants.....                    | 1913  |                                                                  | 5                              |                                         |                                         | 63      |                                | 15                             |                                         | 7                                       | 1                                       | 11      |
|                                   | 1914  | 3                                                                | 2                              |                                         |                                         | 71      |                                | 11                             |                                         | 6                                       | 1                                       | 6       |
| 23 plants.....                    | 1914  | 3                                                                | 2                              |                                         |                                         | 76      |                                | 8                              |                                         | 6                                       | 1                                       | 5       |
|                                   | 1915  | 3                                                                | 1                              |                                         |                                         | 73      |                                | 10                             |                                         | 7                                       | 2                                       | 5       |
| 23 plants.....                    | 1914  | 2                                                                | 2                              |                                         |                                         | 74      |                                | 7                              |                                         | 3                                       | (1)                                     | 11      |
|                                   | 1915  | 2                                                                | 1                              |                                         |                                         | 73      |                                | 9                              |                                         | 3                                       | 1                                       | 11      |
| Plate mills:                      |       |                                                                  |                                |                                         |                                         |         |                                |                                |                                         |                                         |                                         |         |
| 11 plants.....                    | 1910  |                                                                  | 13                             |                                         |                                         | 82      |                                | 1                              |                                         |                                         |                                         | 5       |
|                                   | 1911  | 3                                                                | 35                             |                                         |                                         | 57      |                                | (1)                            |                                         |                                         |                                         | 5       |
|                                   | 1912  | 2                                                                | 34                             |                                         |                                         | 57      |                                | 1                              |                                         |                                         |                                         | 7       |
| 11 plants.....                    | 1912  | 2                                                                | 33                             |                                         |                                         | 57      |                                | 1                              |                                         |                                         |                                         | 8       |
|                                   | 1913  |                                                                  | 37                             |                                         |                                         | 54      |                                | 2                              |                                         |                                         | 1                                       | 7       |
| 11 plants.....                    | 1913  | (1)                                                              | 36                             |                                         |                                         | 57      |                                | 3                              |                                         |                                         | (1)                                     | 4       |
|                                   | 1914  |                                                                  | 41                             |                                         |                                         | 52      |                                | 4                              |                                         |                                         | (1)                                     | 3       |
| 13 plants.....                    | 1914  |                                                                  | 43                             |                                         |                                         | 49      |                                | 5                              |                                         |                                         | (1)                                     | 3       |
|                                   | 1915  |                                                                  | 46                             |                                         |                                         | 46      |                                | 4                              |                                         |                                         | (1)                                     | 3       |
| 13 plants.....                    | 1914  |                                                                  | 34                             |                                         |                                         | 57      |                                | 3                              |                                         |                                         | (1)                                     | 6       |
|                                   | 1915  | (1)                                                              | 35                             |                                         |                                         | 55      |                                | 3                              |                                         |                                         | (1)                                     | 6       |
| Standard rail mills:              |       |                                                                  |                                |                                         |                                         |         |                                |                                |                                         |                                         |                                         |         |
| 6 plants.....                     | 1910  |                                                                  |                                |                                         |                                         | 68      |                                | 1                              |                                         | 2                                       |                                         | 30      |
|                                   | 1911  |                                                                  |                                |                                         |                                         | 90      |                                | 5                              |                                         | 2                                       |                                         | 3       |
| 7 plants.....                     | 1911  |                                                                  |                                |                                         |                                         | 91      |                                | 5                              |                                         | 2                                       |                                         | 3       |
|                                   | 1912  |                                                                  |                                |                                         |                                         | 90      |                                | 6                              |                                         | 2                                       |                                         | 2       |
| 7 plants.....                     | 1912  |                                                                  |                                |                                         |                                         | 97      |                                | 1                              |                                         |                                         |                                         | 2       |
|                                   | 1913  |                                                                  |                                |                                         |                                         | 97      |                                | 1                              |                                         | (1)                                     |                                         | 2       |
| 6 plants.....                     | 1913  |                                                                  |                                |                                         |                                         | 95      |                                | 1                              |                                         | 2                                       |                                         | 2       |
|                                   | 1914  |                                                                  |                                |                                         |                                         | 99      |                                |                                |                                         |                                         |                                         | 2       |

¹ Less than one-half of 1 per cent.

TABLE 6.—PER CENT OF EMPLOYEES IN EACH DEPARTMENT WORKING EACH SPECIFIED NUMBER OF DAYS PER WEEK, BY YEARS, 1907 TO 1915—Concluded.

| Department, and number of plants. | Year. | Per cent of employees whose customary working time per week was— |                                |                                         |                                         |         |                                |                                |                                         |                                         |                                         |         |
|-----------------------------------|-------|------------------------------------------------------------------|--------------------------------|-----------------------------------------|-----------------------------------------|---------|--------------------------------|--------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|---------|
|                                   |       | 5 days.                                                          | 5 days and 6 days alternately. | 5 days, 5 days, and 6 days in rotation. | 5 days, 6 days, and 6 days in rotation. | 6 days. | 5 days and 7 days alternately. | 6 days and 7 days alternately. | 5 days, 6 days, and 7 days in rotation. | 6 days, 6 days, and 7 days in rotation. | 6 days, 7 days, and 7 days in rotation. | 7 days. |
| Standard rail mills—Conold.       | 1914  |                                                                  | 8                              |                                         | 1                                       | 90      |                                |                                |                                         |                                         |                                         | 1       |
| 7 plants.....                     | 1915  |                                                                  | 6                              |                                         | 2                                       | 91      |                                | 1                              |                                         |                                         |                                         | 2       |
| 7 plants.....                     | 1914  |                                                                  | 7                              |                                         | 1                                       | 88      |                                | 1                              |                                         |                                         |                                         | 4       |
|                                   | 1915  |                                                                  | 5                              |                                         | 1                                       | 88      |                                | 1                              |                                         |                                         |                                         | 5       |
| Bar mills:                        |       |                                                                  |                                |                                         |                                         |         |                                |                                |                                         |                                         |                                         |         |
| 15 plants.....                    | 1907  | 2                                                                | 52                             | 2                                       | 3                                       | 39      | 1                              | 2                              |                                         |                                         |                                         | 1       |
|                                   | 1908  | 3                                                                | 49                             | 2                                       | 2                                       | 42      | 1                              | 1                              |                                         |                                         |                                         | 1       |
|                                   | 1909  | 1                                                                | 48                             | 2                                       | 2                                       | 43      | (1)                            | 2                              |                                         |                                         |                                         | 2       |
|                                   | 1910  | 1                                                                | 46                             | 2                                       | 2                                       | 48      | (1)                            | 1                              |                                         |                                         |                                         | 1       |
| 25 plants.....                    | 1910  | 4                                                                | 30                             | 1                                       | 1                                       | 60      | (1)                            | 1                              |                                         |                                         |                                         | 3       |
|                                   | 1911  | 1                                                                | 41                             | 1                                       | 1                                       | 54      | (1)                            | 1                              |                                         |                                         |                                         | (1)     |
| 26 plants.....                    | 1911  | 1                                                                | 43                             | 1                                       | 1                                       | 53      | (1)                            | 1                              |                                         |                                         |                                         | (1)     |
|                                   | 1912  | 1                                                                | 46                             | 1                                       | 1                                       | 49      | (1)                            | 1                              |                                         |                                         |                                         | (1)     |
| 26 plants.....                    | 1912  | 1                                                                | 48                             | 1                                       | 1                                       | 47      | (1)                            | 1                              |                                         | (1)                                     |                                         | (1)     |
|                                   | 1913  | 4                                                                | 51                             | 1                                       | 1                                       | 33      | (1)                            | 2                              |                                         | 8                                       | (1)                                     | 1       |
| 44 plants.....                    | 1913  | 7                                                                | 48                             | 2                                       | 1                                       | 35      | (1)                            | 1                              |                                         | 5                                       | (1)                                     | 1       |
|                                   | 1914  | 7                                                                | 44                             | 3                                       | 1                                       | 39      | (1)                            | 1                              |                                         | 5                                       | (1)                                     | 1       |
| 57 plants.....                    | 1914  | 5                                                                | 53                             | 2                                       | 1                                       | 32      | (1)                            | 1                              |                                         | 5                                       | (1)                                     | (1)     |
|                                   | 1915  | 5                                                                | 54                             | 2                                       | 1                                       | 38      | (1)                            | (1)                            |                                         | (1)                                     |                                         | (1)     |
| 57 plants.....                    | 1914  | 6                                                                | 47                             | 2                                       | 1                                       | 38      | (1)                            | 1                              |                                         | 4                                       | (1)                                     | 1       |
|                                   | 1915  | 6                                                                | 48                             | 1                                       | 1                                       | 43      | (1)                            | 1                              |                                         | (1)                                     |                                         | 1       |
| Sheet mills:                      |       |                                                                  |                                |                                         |                                         |         |                                |                                |                                         |                                         |                                         |         |
| 9 plants.....                     | 1910  | (1)                                                              | 2                              | 81                                      |                                         | 16      |                                |                                |                                         |                                         |                                         | 1       |
|                                   | 1911  | (1)                                                              | 1                              | 84                                      |                                         | 14      |                                |                                |                                         |                                         |                                         | 1       |
| 9 plants.....                     | 1911  | (1)                                                              | 1                              | 84                                      |                                         | 14      |                                |                                |                                         |                                         |                                         | 1       |
|                                   | 1912  | (1)                                                              | 2                              | 84                                      |                                         | 14      |                                | (1)                            |                                         |                                         |                                         | 1       |
| 8 plants.....                     | 1912  | (1)                                                              | 2                              | 87                                      |                                         | 10      |                                | (1)                            |                                         |                                         |                                         | 1       |
|                                   | 1913  | (1)                                                              | 2                              | 87                                      |                                         | 11      |                                |                                |                                         |                                         |                                         | (1)     |
| 13 plants.....                    | 1913  | 1                                                                | (1)                            | 81                                      | 6                                       | 11      |                                | (1)                            |                                         |                                         |                                         | (1)     |
|                                   | 1914  | (1)                                                              | (1)                            | 84                                      | 6                                       | 9       |                                | (1)                            |                                         |                                         |                                         | 1       |
| 15 plants.....                    | 1914  | (1)                                                              | (1)                            | 83                                      | 5                                       | 11      |                                | (1)                            |                                         |                                         |                                         | 1       |
|                                   | 1915  | (1)                                                              | 1                              | 80                                      | 6                                       | 11      |                                | (1)                            |                                         |                                         |                                         | 1       |
| 15 plants.....                    | 1914  | (1)                                                              | 2                              | 58                                      | 3                                       | 32      |                                | 1                              |                                         |                                         |                                         | 4       |
|                                   | 1915  | 1                                                                | 3                              | 55                                      | 4                                       | 32      |                                | 1                              |                                         |                                         |                                         | 4       |
| Tin-plate mills:                  |       |                                                                  |                                |                                         |                                         |         |                                |                                |                                         |                                         |                                         |         |
| 5 plants.....                     | 1910  | (1)                                                              | 1                              | 79                                      |                                         | 20      |                                |                                |                                         |                                         |                                         | (1)     |
|                                   | 1911  | (1)                                                              | 1                              | 80                                      |                                         | 20      |                                |                                |                                         |                                         |                                         | (1)     |
| 6 plants.....                     | 1911  | (1)                                                              | (1)                            | 79                                      |                                         | 21      |                                |                                |                                         |                                         |                                         | (1)     |
|                                   | 1912  |                                                                  | 2                              | 79                                      |                                         | 20      |                                |                                |                                         |                                         |                                         | (1)     |
| 6 plants.....                     | 1912  |                                                                  | 2                              | 78                                      |                                         | 20      |                                |                                |                                         |                                         |                                         | (1)     |
|                                   | 1913  |                                                                  | 1                              | 75                                      |                                         | 24      |                                | (1)                            |                                         |                                         |                                         | (1)     |
| 10 plants.....                    | 1913  |                                                                  | 1                              | 74                                      |                                         | 24      |                                |                                |                                         |                                         |                                         | (1)     |
|                                   | 1914  |                                                                  | 2                              | 75                                      |                                         | 23      |                                |                                |                                         |                                         |                                         | (1)     |
| 11 plants.....                    | 1914  |                                                                  | 2                              | 75                                      |                                         | 23      |                                |                                |                                         |                                         |                                         | (1)     |
|                                   | 1915  |                                                                  | 1                              | 74                                      |                                         | 25      |                                |                                |                                         |                                         |                                         | (1)     |
| 11 plants.....                    | 1914  | (1)                                                              | 4                              | 58                                      |                                         | 37      |                                | (1)                            |                                         |                                         |                                         | 1       |
|                                   | 1915  | (1)                                                              | 3                              | 57                                      |                                         | 37      |                                | (1)                            |                                         |                                         |                                         | 2       |

<sup>1</sup> Less than one-half of 1 per cent.



## FULL-TIME WORKING HOURS PER WEEK.

Employees in the several departments are classified in Table 7 to show the per cent working specified hours per week.

TABLE 7.—PER CENT OF EMPLOYEES IN EACH DEPARTMENT WORKING EACH SPECIFIED NUMBER OF HOURS PER WEEK, BY YEARS, 1907 TO 1915.

[The figures for each group of years are for identical plants. Two sets of figures are given for the plants reporting for 1914 and 1915, the first covering only the principal productive occupations in each department, as shown for all the preceding groups of years and therefore strictly comparable with them, and the second including also the unclassified occupations (see pp. 55 and 56), tabulated for 1914 and 1915 for the first time.]

| Department, and number of plants.        | Year. | Per cent of employees whose full-time hours per week were— |                      |                 |     |                      |     |                      |    |         |
|------------------------------------------|-------|------------------------------------------------------------|----------------------|-----------------|-----|----------------------|-----|----------------------|----|---------|
|                                          |       | 48 and under.                                              | Over 48 and under 56 | 56 and under 60 | 60  | Over 60 and under 72 | 72  | Over 72 and under 84 | 84 | Over 84 |
| Blast furnaces:<br>20 plants .....       | 1907  |                                                            |                      |                 | 3   | 13                   | (1) | 5                    | 80 | .....   |
|                                          | 1908  |                                                            |                      |                 | 5   | 17                   |     | 7                    | 71 | .....   |
|                                          | 1909  |                                                            |                      |                 | 3   | 15                   | (1) | 8                    | 74 | .....   |
|                                          | 1910  |                                                            | (1)                  |                 | 4   | 12                   | 1   | 7                    | 76 | .....   |
|                                          | 1910  |                                                            | (1)                  | (1)             | 4   | 13                   | 1   | 8                    | 75 | .....   |
|                                          | 1911  |                                                            | (1)                  | (1)             | 4   | 12                   | 6   | 6                    | 72 | .....   |
|                                          | 1911  |                                                            |                      | (1)             | 4   | 12                   | 6   | 6                    | 72 | .....   |
|                                          | 1912  |                                                            | (1)                  | 5               | 5   | 11                   | 13  | 6                    | 61 | .....   |
|                                          | 1912  |                                                            | (1)                  |                 | 5   | 11                   | 13  | 6                    | 61 | .....   |
|                                          | 1913  |                                                            | (1)                  | 1               | 5   | 12                   | 14  | 6                    | 63 | (1)     |
| 34 plants .....                          | 1913  |                                                            |                      | 1               | 6   | 11                   | 13  | 6                    | 64 | (1)     |
|                                          | 1914  | (1)                                                        |                      | 1               | 7   | 11                   | 26  | 7                    | 46 | (1)     |
|                                          | 1914  | (1)                                                        |                      | 1               | 8   | 11                   | 25  | 7                    | 46 | (1)     |
|                                          | 1915  | (1)                                                        | (1)                  | 1               | 6   | 12                   | 26  | 7                    | 47 | (1)     |
|                                          | 1915  | (1)                                                        |                      | 1               | 6   | 12                   | 26  | 7                    | 46 | (1)     |
|                                          | 1915  | (1)                                                        | 1                    | 5               | 12  | 12                   | 23  | 7                    | 41 | (1)     |
|                                          | 1915  | (1)                                                        | 1                    | 5               | 12  | 12                   | 23  | 7                    | 41 | (1)     |
|                                          | 1915  | (1)                                                        | 1                    | 5               | 12  | 12                   | 23  | 7                    | 41 | (1)     |
|                                          | 1915  | (1)                                                        | 1                    | 5               | 12  | 12                   | 23  | 7                    | 41 | (1)     |
|                                          | 1915  | (1)                                                        | 1                    | 5               | 12  | 12                   | 23  | 7                    | 41 | (1)     |
| Bessemer converters:<br>9 plants .....   | 1907  | 23                                                         | 1                    | 1               | 1   | 8                    | 21  | 24                   | 23 | (1)     |
|                                          | 1908  | 29                                                         | 1                    | 2               | 2   | 8                    | 27  | 15                   | 16 | .....   |
|                                          | 1909  | 22                                                         | 2                    | 1               | 1   | 6                    | 25  | 26                   | 18 | .....   |
|                                          | 1910  | 18                                                         | 7                    |                 | 3   | 1                    | 30  | 13                   | 25 | 3       |
|                                          | 1910  | 17                                                         | 7                    |                 | 3   | 1                    | 33  | 12                   | 24 | 3       |
|                                          | 1911  | 19                                                         | 1                    | 1               | 3   | 7                    | 41  | 20                   | 9  | .....   |
|                                          | 1911  | 19                                                         | 1                    | 1               | 2   | 7                    | 41  | 20                   | 9  | .....   |
|                                          | 1912  | 23                                                         | 1                    | 1               | 2   | 7                    | 30  | 22                   | 15 | .....   |
|                                          | 1912  | 22                                                         | 2                    | 1               | 2   | 7                    | 30  | 21                   | 15 | .....   |
|                                          | 1913  | 17                                                         | 8                    |                 | 1   | 8                    | 33  | 24                   | 10 | .....   |
| 10 plants .....                          | 1913  | 16                                                         | 10                   | (1)             | 1   | 10                   | 29  | 24                   | 11 | .....   |
|                                          | 1914  | 17                                                         | 9                    | (1)             | (1) | 12                   | 37  | 12                   | 13 | .....   |
|                                          | 1914  | 18                                                         | 8                    | 1               | 3   | 10                   | 39  | 10                   | 11 | .....   |
|                                          | 1915  | 18                                                         | 8                    | (1)             | 4   | 7                    | 41  | 9                    | 12 | .....   |
|                                          | 1915  | 18                                                         | 8                    | (1)             | 4   | 7                    | 41  | 9                    | 12 | .....   |
|                                          | 1915  | 18                                                         | 8                    | (1)             | 4   | 7                    | 41  | 9                    | 12 | .....   |
|                                          | 1915  | 18                                                         | 8                    | (1)             | 4   | 7                    | 41  | 9                    | 12 | .....   |
|                                          | 1915  | 18                                                         | 8                    | (1)             | 4   | 7                    | 41  | 9                    | 12 | .....   |
|                                          | 1915  | 18                                                         | 8                    | (1)             | 4   | 7                    | 41  | 9                    | 12 | .....   |
|                                          | 1915  | 18                                                         | 8                    | (1)             | 4   | 7                    | 41  | 9                    | 12 | .....   |
| Open-hearth furnaces:<br>17 plants ..... | 1914  | 12                                                         | 7                    | 2               | 4   | 11                   | 40  | 13                   | 12 | .....   |
|                                          | 1915  | 12                                                         | 6                    | 1               | 5   | 8                    | 44  | 11                   | 13 | .....   |
|                                          | 1910  | (1)                                                        | 1                    | (1)             | 2   | 13                   | 25  | 33                   | 27 | .....   |
|                                          | 1911  |                                                            | 1                    |                 | 2   | 25                   | 23  | 34                   | 15 | .....   |
|                                          | 1911  |                                                            | 1                    |                 | 2   | 25                   | 23  | 34                   | 15 | .....   |
|                                          | 1912  |                                                            | 2                    | (1)             | 2   | 11                   | 26  | 40                   | 20 | .....   |
|                                          | 1912  |                                                            | 2                    | (1)             | 2   | 11                   | 23  | 40                   | 23 | .....   |
|                                          | 1913  |                                                            | 1                    | (1)             | 1   | 8                    | 23  | 37                   | 31 | .....   |
|                                          | 1913  |                                                            | 1                    | (1)             | 1   | 8                    | 23  | 37                   | 31 | .....   |
|                                          | 1914  |                                                            | 1                    | (1)             | 1   | 8                    | 21  | 37                   | 32 | .....   |
| 17 plants .....                          | 1914  |                                                            | 1                    | 5               | 4   | 10                   | 22  | 38                   | 22 | (1)     |
|                                          | 1914  | (1)                                                        | 1                    | 4               | 6   | 8                    | 20  | 40                   | 21 | (1)     |
|                                          | 1915  |                                                            | (1)                  | 4               | 5   | 10                   | 22  | 38                   | 22 | .....   |
|                                          | 1915  | (1)                                                        | 1                    | 4               | 6   | 9                    | 23  | 32                   | 24 | (1)     |
|                                          | 1915  | (1)                                                        | 1                    | 4               | 6   | 9                    | 23  | 32                   | 24 | (1)     |
|                                          | 1915  | (1)                                                        | 1                    | 4               | 6   | 9                    | 23  | 32                   | 24 | (1)     |
|                                          | 1915  | (1)                                                        | 1                    | 4               | 6   | 9                    | 23  | 32                   | 24 | (1)     |
|                                          | 1915  | (1)                                                        | 1                    | 4               | 6   | 9                    | 23  | 32                   | 24 | (1)     |
|                                          | 1915  | (1)                                                        | 1                    | 4               | 6   | 9                    | 23  | 32                   | 24 | (1)     |
|                                          | 1915  | (1)                                                        | 1                    | 4               | 6   | 9                    | 23  | 32                   | 24 | (1)     |

<sup>1</sup> Less than one-half of 1 per cent.

TABLE 7.—PER CENT OF EMPLOYEES IN EACH DEPARTMENT WORKING EACH SPECIFIED NUMBER OF HOURS PER WEEK, BY YEARS, 1907 TO 1915—Continued.

| Department, and number of plants. | Year. | Per cent of employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |     |
|-----------------------------------|-------|------------------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|-----|
|                                   |       | 48 and under.                                              | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84  |
| Puddling mills:                   |       |                                                            |                      |                 |    |                      |    |                      |     |
| 29 plants                         | 1914  | 29                                                         | 44                   | 14              | 5  | 7                    | 1  | (1)                  |     |
|                                   | 1915  | 32                                                         | 43                   | 12              | 5  | 7                    | 1  | (1)                  |     |
| 29 plants                         | 1914  | 27                                                         | 42                   | 13              | 6  | 9                    | 1  | 1                    | (1) |
|                                   | 1915  | 31                                                         | 42                   | 11              | 6  | 9                    | 1  | (1)                  | (1) |
| Blooming mills:                   |       |                                                            |                      |                 |    |                      |    |                      |     |
| 19 plants                         | 1910  | 2                                                          | 6                    |                 | 1  | 10                   | 57 | 7                    | 17  |
|                                   | 1911  | 2                                                          | 8                    |                 | 2  | 11                   | 56 | 10                   | 12  |
|                                   | 1912  | 2                                                          | 8                    |                 | 1  | 11                   | 55 | 11                   | 12  |
| 19 plants                         | 1912  | 2                                                          | 8                    |                 | 1  | 11                   | 52 | 13                   | 12  |
|                                   | 1913  | 2                                                          | 8                    |                 | 1  | 12                   | 52 | 17                   | 8   |
| 19 plants                         | 1913  | 3                                                          | 11                   |                 | 1  | 12                   | 47 | 19                   | 6   |
|                                   | 1914  | 4                                                          | 11                   |                 | 3  | 9                    | 55 | 14                   | 4   |
| 23 plants                         | 1914  | 6                                                          | 13                   |                 | 3  | 8                    | 56 | 11                   | 3   |
|                                   | 1915  | 6                                                          | 13                   |                 | 3  | 6                    | 55 | 15                   | 2   |
| 23 plants                         | 1914  | 3                                                          | 7                    | 1               | 5  | 8                    | 59 | 9                    | 9   |
|                                   | 1915  | 2                                                          | 7                    | (1)             | 4  | 7                    | 58 | 12                   | 9   |
| Plate mills:                      |       |                                                            |                      |                 |    |                      |    |                      |     |
| 11 plants                         | 1910  |                                                            |                      |                 | 7  | 57                   | 32 | 1                    | 3   |
|                                   | 1911  |                                                            |                      | (1)             | 9  | 47                   | 42 | 1                    | 1   |
|                                   | 1912  |                                                            |                      | (1)             | 9  | 44                   | 43 | 3                    | 1   |
| 11 plants                         | 1912  |                                                            |                      | (1)             | 8  | 42                   | 43 | 5                    | 2   |
|                                   | 1913  |                                                            |                      | (1)             | 7  | 42                   | 44 | 5                    | 1   |
| 11 plants                         | 1913  |                                                            |                      | (1)             | 7  | 43                   | 43 | 5                    | 1   |
|                                   | 1914  |                                                            | 1                    | (1)             | 4  | 48                   | 39 | 7                    | 1   |
| 13 plants                         | 1914  |                                                            | 1                    | (1)             | 4  | 48                   | 39 | 7                    | 1   |
|                                   | 1915  |                                                            | 2                    | 2               | 4  | 48                   | 36 | 8                    | 1   |
| 13 plants                         | 1914  |                                                            | 1                    | 2               | 4  | 44                   | 39 | 6                    | 4   |
|                                   | 1915  |                                                            | 2                    | 3               | 5  | 41                   | 38 | 7                    | 4   |
| Standard rail mills:              |       |                                                            |                      |                 |    |                      |    |                      |     |
| 6 plants                          | 1910  | 4                                                          | 2                    |                 | 8  | 4                    | 52 | 1                    | 30  |
|                                   | 1911  | 5                                                          | 2                    |                 | 4  | 9                    | 71 | 6                    | 3   |
| 7 plants                          | 1911  | 4                                                          | 2                    |                 | 4  | 8                    | 72 | 7                    | 3   |
|                                   | 1912  | 4                                                          | 2                    |                 | 5  | 8                    | 72 | 8                    | 2   |
| 7 plants                          | 1912  | 4                                                          | 2                    |                 | 4  | 8                    | 78 | 3                    | 2   |
|                                   | 1913  | 4                                                          | 2                    |                 | 7  | 4                    | 80 | 3                    | 2   |
| 6 plants                          | 1913  | 6                                                          | 2                    |                 | 2  | 1                    | 86 | 2                    | 2   |
|                                   | 1914  | 8                                                          |                      |                 | 3  | 2                    | 86 |                      | 1   |
| 7 plants                          | 1914  | 8                                                          |                      |                 | 3  | 11                   | 78 |                      | (1) |
|                                   | 1915  | 6                                                          |                      |                 | 2  | 7                    | 82 | 2                    | 2   |
| 7 plants                          | 1914  | 5                                                          | (1)                  | (1)             | 3  | 13                   | 74 | 1                    | 4   |
|                                   | 1915  | 4                                                          |                      | 1               | 2  | 9                    | 77 | 2                    | 5   |
| Bar mills:                        |       |                                                            |                      |                 |    |                      |    |                      |     |
| 15 plants                         | 1907  | 5                                                          | 5                    | 8               | 9  | 52                   | 19 | 3                    | 1   |
|                                   | 1908  | 4                                                          | 7                    | 7               | 12 | 47                   | 20 | 1                    | (1) |
|                                   | 1909  | 4                                                          | 7                    | 7               | 10 | 59                   | 9  | 3                    | 1   |
|                                   | 1910  | 4                                                          | 6                    | 6               | 12 | 57                   | 13 | 1                    | 1   |
| 25 plants                         | 1910  | 11                                                         | 8                    | 4               | 12 | 46                   | 17 | 3                    | 1   |
|                                   | 1911  | 12                                                         | 10                   | 8               | 7  | 48                   | 14 | 1                    | (1) |
| 26 plants                         | 1911  | 11                                                         | 11                   | 9               | 8  | 47                   | 14 | 1                    | (1) |
|                                   | 1912  | 11                                                         | 12                   | 10              | 7  | 45                   | 14 | 1                    | (1) |
| 26 plants                         | 1912  | 11                                                         | 11                   | 16              | 7  | 41                   | 13 | 1                    | (1) |
|                                   | 1913  | 2                                                          | 21                   | 15              | 8  | 47                   | 5  | 2                    | (1) |
| 44 plants                         | 1913  | 6                                                          | 20                   | 17              | 10 | 41                   | 4  | 2                    | (1) |
|                                   | 1914  | 6                                                          | 20                   | 14              | 10 | 43                   | 6  | 1                    | (1) |

<sup>1</sup> Less than one-half of 1 per cent.

TABLE 7.—PER CENT OF EMPLOYEES IN EACH DEPARTMENT WORKING EACH SPECIFIED NUMBER OF HOURS PER WEEK, BY YEARS, 1907 TO 1915—Concluded.

| Department, and number of plants. | Year. | Per cent of employees whose full-time hours per week were— |                      |                 |    |                      |     |                      |         |
|-----------------------------------|-------|------------------------------------------------------------|----------------------|-----------------|----|----------------------|-----|----------------------|---------|
|                                   |       | 48 and under.                                              | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72  | Over 72 and under 84 | Over 84 |
| Bar mills—Concluded.              |       |                                                            |                      |                 |    |                      |     |                      |         |
| 57 plants.....                    | 1914  | 5                                                          | 21                   | 13              | 8  | 47                   | 5   | 1                    | (1)     |
|                                   | 1915  | 10                                                         | 16                   | 15              |    | 46                   | 7   | 1                    | (1)     |
| 57 plants.....                    | 1914  | 4                                                          | 19                   | 12              | 12 | 44                   | 7   | 2                    | 1       |
|                                   | 1915  | 8                                                          | 15                   | 15              | 10 | 42                   | 8   | 1                    | (1)     |
| Sheet mills:                      |       |                                                            |                      |                 |    |                      |     |                      |         |
| 9 plants.....                     | 1910  | 81                                                         | (1)                  | 1               | 10 | 4                    | 4   | (1)                  | (1)     |
|                                   | 1911  | 84                                                         | (1)                  | 1               | 7  | 5                    | 4   |                      | (1)     |
| 9 plants.....                     | 1911  | 84                                                         | (1)                  | (1)             | 7  | 5                    | 4   |                      | (1)     |
|                                   | 1912  | 84                                                         | (1)                  | (1)             | 7  | 5                    | 3   | (1)                  | (1)     |
| 8 plants.....                     | 1912  | 87                                                         | (1)                  | 1               | 6  | 3                    | 3   | (1)                  | (1)     |
|                                   | 1913  | 87                                                         |                      | 1               | 5  | 4                    | 4   |                      |         |
| 13 plants.....                    | 1913  | 88                                                         |                      | 2               | 4  | 1                    | 4   | (1)                  | (1)     |
|                                   | 1914  | 90                                                         | (1)                  | 1               | 2  | 3                    | 3   | (1)                  | (1)     |
| 15 plants.....                    | 1914  | 89                                                         | (1)                  | 1               | 2  | 3                    | 5   | (1)                  | (1)     |
|                                   | 1915  | 87                                                         | (1)                  | 1               | 3  | 3                    | 4   | 1                    | (1)     |
| 15 plants.....                    | 1914  | 62                                                         | (1)                  | 2               | 8  | 10                   | 13  | 2                    | 2       |
|                                   | 1915  | 61                                                         | (1)                  | 2               | 10 | 12                   | 11  | 2                    | 2       |
| Tin-plate mills:                  |       |                                                            |                      |                 |    |                      |     |                      |         |
| 5 plants.....                     | 1910  | 81                                                         | 2                    | 11              | 4  | 3                    |     |                      |         |
|                                   | 1911  | 81                                                         | 2                    | 9               | 5  | 3                    | (1) |                      |         |
| 6 plants.....                     | 1911  | 80                                                         | 2                    | 9               | 6  | 3                    | (1) |                      |         |
|                                   | 1912  | 80                                                         | 3                    | 9               | 5  | 3                    | (1) | (1)                  |         |
| 6 plants.....                     | 1912  | 79                                                         | 3                    | 9               | 6  | 3                    | (1) | (1)                  | (1)     |
|                                   | 1913  | 79                                                         | 1                    | 9               | 6  | 5                    | (1) | (1)                  |         |
| 10 plants.....                    | 1913  | 75                                                         | 3                    | 11              | 3  | 8                    | (1) |                      |         |
|                                   | 1914  | 76                                                         | 3                    | 10              | 2  | 8                    | (1) |                      | (1)     |
| 11 plants.....                    | 1914  | 76                                                         | 3                    | 10              | 2  | 8                    | (1) |                      | (1)     |
|                                   | 1915  | 77                                                         | 3                    | 12              | 3  | 6                    |     | (1)                  |         |
| 11 plants.....                    | 1914  | 59                                                         | 3                    | 14              | 9  | 12                   | 2   | (1)                  | 1       |
|                                   | 1915  | 60                                                         | 4                    | 14              | 9  | 11                   | 1   | 1                    | (1)     |

<sup>1</sup> Less than one-half of 1 per cent.

Referring to the figures for blast furnaces it is seen that in 1907, in 20 plants reported, 3 per cent of the employees reported worked 60 hours per week when they worked full time; 13 per cent worked over 60 and under 72 hours per week; less than half of 1 per cent worked 72 hours per week; 5 per cent worked over 72 and under 84 hours per week; and 80 per cent worked 84 hours per week. By 1910 the employees working 84 hours per week had decreased to 76 per cent in the same plants, or, as shown by 34 plants, to 75 per cent. A very material reduction was made in working hours by 1911 and a still greater reduction by 1912. Between May, 1913, and May, 1914, in the same group of 35 plants, the number of employees working 84 hours was reduced from 64 per cent to 46 per cent, or to 41 per cent as shown by 38 plants. There was no change between 1914 and 1915.

The per cent of employees working specified hours in the Bessemer converting department, and some other departments, differed materially in the several years owing to fluctuations in the volume of business and to changes from 12 to 8 hour shifts or vice versa.

### COMMON LABORERS.

The rate of wages paid common laborers is to a large extent a basic rate from which are determined the rates for other occupations requiring little skill, hence the rate for common labor is of importance beyond the limits of the occupation proper. The rate per hour of common labor is practically the same in all the departments of a plant, but the earnings per day or week, of course, are determined by the number of hours worked.

TABLE 8.—AVERAGE RATES OF WAGES PER HOUR OF COMMON LABORERS IN EACH DEPARTMENT, BY DISTRICTS, 1907 TO 1915.

[In this table each department of an establishment is counted as a separate plant. The number of plants stated is the total of all departments, the number of plants in each department is not shown here. The figures for each group of years are for identical plants.]

| District, year, and number of plants. | All departments. | Blast furnaces. | Bessemer converters. | Open-hearth furnaces. | Puddling mills. | Bloom-ing mills. | Plate mills. | Stand-ard rail mills. | Bar mills. | Sheet mills. | Tin-plate mills. |
|---------------------------------------|------------------|-----------------|----------------------|-----------------------|-----------------|------------------|--------------|-----------------------|------------|--------------|------------------|
| <b>Eastern:</b>                       |                  |                 |                      |                       |                 |                  |              |                       |            |              |                  |
| 4 plants.....1907                     | \$0.134          | \$0.135         |                      |                       |                 |                  |              |                       | \$0.132    |              |                  |
| 1908                                  | .120             | .115            |                      |                       |                 |                  |              |                       | .131       |              |                  |
| 1909                                  | .123             | .119            |                      |                       |                 |                  |              |                       | .131       |              |                  |
| 1910                                  | .138             | .138            |                      |                       |                 |                  |              |                       | .138       |              |                  |
| 18 plants.....1910                    | .142             | .142            |                      | \$0.145               |                 | \$0.143          | \$0.131      |                       | .147       |              |                  |
| 1911                                  | .141             | .140            |                      | .146                  |                 | .139             | .131         |                       | .148       |              |                  |
| 19 plants.....1911                    | .141             | .140            |                      | .146                  |                 | .139             | .131         |                       | .145       |              |                  |
| 1912                                  | .143             | .144            |                      | .152                  |                 | .141             | .131         |                       | .142       |              |                  |
| 20 plants.....1912                    | .144             | .144            |                      | .152                  |                 | .141             | .133         |                       | .145       |              |                  |
| 1913                                  | .157             | .151            |                      | .168                  |                 | .163             | .151         |                       | .160       |              |                  |
| 28 plants.....1913                    | .157             | .151            |                      | .168                  |                 | .162             | .151         | \$0.160               | .156       |              |                  |
| 1914                                  | .153             | .150            |                      | .168                  |                 | .160             | .150         | .160                  | .151       |              |                  |
| 39 plants.....1914                    | .156             | .153            |                      | .169                  | \$0.163         | .172             | .151         | .157                  | .151       |              |                  |
| 1915                                  | .155             | .151            |                      | .171                  | .157            | .154             | .151         | .161                  | .150       |              |                  |
| <b>Pittsburgh:</b>                    |                  |                 |                      |                       |                 |                  |              |                       |            |              |                  |
| 17 plants.....1907                    | .154             | .152            | \$0.156              |                       |                 |                  |              |                       | .154       |              |                  |
| 1908                                  | .156             | .154            | .156                 |                       |                 |                  |              |                       | .157       |              |                  |
| 1909                                  | .152             | .152            | .153                 |                       |                 |                  |              |                       | .151       |              |                  |
| 1910                                  | .164             | .165            | .164                 |                       |                 |                  |              |                       | .163       |              |                  |
| 57 plants.....1910                    | .164             | .166            | .164                 | .162                  |                 | .168             | .167         | .161                  | .161       | \$0.164      | \$0.165          |
| 1911                                  | .166             | .165            | .167                 | .164                  |                 | .170             | .168         | .169                  | .163       | .166         | .163             |
| 59 plants.....1911                    | .166             | .165            | .167                 | .164                  |                 | .170             | .168         | .169                  | .163       | .166         | .164             |
| 1912                                  | .167             | .164            | .167                 | .165                  |                 | .169             | .173         | .167                  | .163       | .169         | .169             |
| 59 plants.....1912                    | .167             | .163            | .168                 | .165                  |                 | .169             | .172         | .168                  | .163       | .168         | .167             |
| 1913                                  | .190             | .188            | .192                 | .190                  |                 | .192             | .193         | .191                  | .182       | .191         | .190             |
| 61 plants.....1913                    | .190             | .191            | .192                 | .190                  |                 | .192             | .191         | .189                  | .183       | .191         | .192             |
| 1914                                  | .189             | .192            | .192                 | .187                  |                 | .192             | .191         | .194                  | .180       | .190         | .192             |
| 76 plants.....1914                    | .190             | .192            | .193                 | .188                  | .190            | .192             | .188         | .194                  | .183       | .192         | .192             |
| 1915                                  | .190             | .189            | .193                 | .193                  | .189            | .192             | .189         | .184                  | .184       | .192         | .194             |

TABLE 8.—AVERAGE RATES OF WAGES PER HOUR OF COMMON LABORERS IN EACH DEPARTMENT, BY DISTRICTS, 1907 TO 1915—Concluded.

| District, year, and number of plants. | All departments. | Blast furnaces. | Bessemer converters. | Open-hearth furnaces. | Puddling mills. | Bloom-ing mills. | Plate mills. | Stand-ard rail mills. | Bar mills. | Sheet mills. | Tin-plate mills. |
|---------------------------------------|------------------|-----------------|----------------------|-----------------------|-----------------|------------------|--------------|-----------------------|------------|--------------|------------------|
| Great Lakes and Middle West:          |                  |                 |                      |                       |                 |                  |              |                       |            |              |                  |
| 12 plants.....1907                    | \$0.158          | \$0.162         | \$0.154              | .....                 | .....           | .....            | .....        | .....                 | \$0.159    | .....        | .....            |
| 1908                                  | .153             | .152            | .152                 | .....                 | .....           | .....            | .....        | .....                 | .158       | .....        | .....            |
| 1909                                  | .151             | .153            | .146                 | .....                 | .....           | .....            | .....        | .....                 | .157       | .....        | .....            |
| 1910                                  | .162             | .161            | .159                 | .....                 | .....           | .....            | .....        | .....                 | .169       | .....        | .....            |
| 37 plants.....1910                    | .163             | .162            | .161                 | \$0.162               | .....           | \$0.163          | \$0.164      | \$0.163               | .167       | .....        | .....            |
| 1911                                  | .166             | .166            | .164                 | .166                  | .....           | .166             | .164         | .169                  | .166       | .....        | .....            |
| 39 plants.....1911                    | .166             | .166            | .164                 | .166                  | .....           | .166             | .164         | .169                  | .166       | .....        | .....            |
| 1912                                  | .167             | .167            | .166                 | .167                  | .....           | .167             | .165         | .169                  | .167       | .....        | .....            |
| 40 plants.....1912                    | .168             | .166            | .166                 | .170                  | .....           | .167             | .162         | .169                  | .170       | .....        | .....            |
| 1913                                  | .191             | .189            | .190                 | .193                  | .....           | .191             | .188         | .194                  | .194       | .....        | .....            |
| 49 plants.....1913                    | .189             | .189            | .190                 | .190                  | .....           | .190             | .195         | .191                  | .189       | \$0.187      | \$0.186          |
| 1914                                  | .190             | .190            | .193                 | .192                  | .....           | .192             | .190         | .192                  | .192       | .188         | .186             |
| 70 plants.....1914                    | .189             | .190            | .191                 | .191                  | \$0.182         | .190             | .190         | .192                  | .190       | .180         | .186             |
| 1915                                  | .188             | .187            | .191                 | .191                  | .180            | .190             | .189         | .189                  | .190       | .180         | .186             |
| Southern:                             |                  |                 |                      |                       |                 |                  |              |                       |            |              |                  |
| 6 plants.....1907                     | .130             | .130            | .....                | .....                 | .....           | .....            | .....        | .....                 | .....      | .....        | .....            |
| 1908                                  | .111             | .111            | .....                | .....                 | .....           | .....            | .....        | .....                 | .....      | .....        | .....            |
| 1909                                  | .112             | .112            | .....                | .....                 | .....           | .....            | .....        | .....                 | .....      | .....        | .....            |
| 1910                                  | .127             | .127            | .....                | .....                 | .....           | .....            | .....        | .....                 | .....      | .....        | .....            |
| 14 plants.....1910                    | .129             | .128            | .....                | .130                  | .....           | .131             | .....        | .....                 | .....      | .....        | .....            |
| 1911                                  | .131             | .131            | .....                | .130                  | .....           | .132             | .....        | .....                 | .....      | .....        | .....            |
| 14 plants.....1911                    | .131             | .131            | .....                | .130                  | .....           | .132             | .....        | .....                 | .....      | .....        | .....            |
| 1912                                  | .131             | .130            | .....                | .134                  | .....           | .131             | .....        | .....                 | .....      | .....        | .....            |
| 15 plants.....1912                    | .130             | .130            | .....                | .132                  | .....           | .131             | .....        | .....                 | .....      | .....        | .....            |
| 1913                                  | .138             | .136            | .....                | .150                  | .....           | .140             | .....        | .....                 | .....      | .....        | .....            |
| 22 plants.....1913                    | .140             | .136            | .....                | .152                  | .....           | .138             | .....        | .....                 | .142       | .....        | .....            |
| 1914                                  | .141             | .139            | .....                | .152                  | .....           | .141             | .....        | .....                 | .141       | .....        | .....            |
| 29 plants.....1914                    | .146             | .137            | .....                | .169                  | .144            | .148             | .....        | .....                 | .141       | .....        | .....            |
| 1915                                  | .141             | .134            | .....                | .158                  | .146            | .140             | .....        | .....                 | .142       | .....        | .....            |
| Total:                                |                  |                 |                      |                       |                 |                  |              |                       |            |              |                  |
| 39 plants.....1907                    | .151             | .146            | .155                 | .....                 | .....           | .....            | .....        | .....                 | .153       | .....        | .....            |
| 1908                                  | .147             | .140            | .155                 | .....                 | .....           | .....            | .....        | .....                 | .153       | .....        | .....            |
| 1909                                  | .145             | .138            | .151                 | .....                 | .....           | .....            | .....        | .....                 | .150       | .....        | .....            |
| 1910                                  | .157             | .152            | .163                 | .....                 | .....           | .....            | .....        | .....                 | .161       | .....        | .....            |
| 126 plants.....1910                   | .158             | .150            | .163                 | .157                  | .....           | .162             | .159         | .163                  | .160       | .164         | .165             |
| 1911                                  | .161             | .151            | .166                 | .161                  | .....           | .163             | .158         | .169                  | .160       | .166         | .163             |
| 131 plants.....1911                   | .161             | .151            | .166                 | .161                  | .....           | .163             | .158         | .169                  | .159       | .166         | .164             |
| 1912                                  | .162             | .152            | .167                 | .163                  | .....           | .164             | .160         | .168                  | .159       | .169         | .169             |
| 134 plants.....1912                   | .162             | .152            | .167                 | .164                  | .....           | .163             | .161         | .169                  | .160       | .168         | .167             |
| 1913                                  | .183             | .171            | .192                 | .187                  | .....           | .184             | .181         | .193                  | .178       | .191         | .190             |
| 160 plants.....1913                   | .181             | .173            | .192                 | .185                  | .....           | .185             | .175         | .187                  | .169       | .190         | .189             |
| 1914                                  | .181             | .176            | .192                 | .186                  | .....           | .187             | .174         | .190                  | .168       | .190         | .189             |
| 214 plants.....1914                   | .181             | .177            | .193                 | .185                  | .173            | .187             | .174         | .185                  | .173       | .188         | .189             |
| 1915                                  | .180             | .171            | .193                 | .186                  | .167            | .187             | .174         | .182                  | .173       | .188         | .190             |

There are in every department various occupations which require little skill but which have distinctive positional names and are necessary to the proper operation of the department, and employees in these occupations must be on duty during the entire working time of the department. They are usually paid little if any more than the

regular rate for common labor, but such positions are eagerly sought by laborers, owing to the regularity of employment and the consequent stability of earnings, as well as to the fact that men in these occupations are in line for promotion. Employees in these occupations are not generally classified as common laborers by iron and steel establishments, and consequently, so far as possible, they are not so classified in this report. However, even after this exclusion, 11 per cent of all the employees tabulated for 1915 are classified as laborers.

### VOLUME OF EMPLOYMENT, JULY, 1913, TO JUNE, 1915.

To determine the variable amount of employment afforded by the iron and steel industry during the last two years covered by this report, data as to the number of turns worked in each department, the number of turns not worked owing to slack work and other causes, and the total amount of the pay rolls, were obtained from the plants which furnished wages data for the several departments, for each month of the period from July, 1913, to June, 1915, inclusive. These reports are tabulated by months and presented in Table 10, while the number of employees necessary to operate the entire equipment of the total plants in each department on full time is shown in Table 9.

These tables clearly demonstrate the depressed condition of the iron and steel industry during this period. The early part of 1913 was a time of such large production that nearly all plants increased their rates of pay to employees, but the latter part of 1913 was of opposite character; business improved somewhat during the spring and summer of 1914, but November and December of that year were the months most affected by the depression. However, every department shows an improvement from the first month of 1915. Unfortunately similar data are not at hand for the last half of 1915, but it is a well known fact that all plants have been working at practically 100 per cent of full time since the autumn of that year and through 1916. The bureau's reports published in the MONTHLY REVIEW clearly demonstrate the enormous increase in number of employees, in the amount of pay rolls, and in wage rates. A brief résumé of such more recent figures is given on pages 10 to 14.

A "turn" is a day's work for a crew composed of several men working together. Each plant in a department is made up of one or more units, each unit having its own crews. One blast-furnace plant may represent from 1 to 12 separate stacks, an open-hearth furnace plant from 5 to 25 separate furnaces, a sheet or tin-plate mill plant from 5 to 42 separate mills, etc., and in computing turns each unit is considered separately, so that if a bar-mill plant is made up of five separate mills, each one working two turns per day, in a 31-day month there would be  $5 \times 2 \times 31 = 310$  possible turns for the plant.

Turns for Bessemer converting plants, however, indicate the total turns for each plant as a whole only, as there is not a separate crew for each converter, the number of men in the crew varying according to the number of converters operated. For this department, therefore, the amount of the pay-roll totals more clearly illustrates the per cent of full-time operation of the entire equipment than does the per cent which the turns actually made is of the turns customarily worked.

The length of a turn in the various plants, or in the several departments of a plant, varies from 8 to 12 hours from Monday to Friday, and, except in blast furnaces, open-hearth furnaces, and sheet and tin-plate mills departments, the Saturday turn is usually from one-half to three-quarters as long. Frequently "lighting up" adds to the length of the first turn of a week. The majority of blast furnace, open-hearth furnace, blooming mill, plate mill, and rail mill employees work 12 hours per day; Bessemer converting employees generally work 12 hours per turn, although in a large proportion of plants there are some employees divided into three shifts, working 8 hours each; the greater number of sheet and tin-plate mill employees also are divided into three shifts working 8 hours each; puddling mill employees to a large extent work turns of 8, 9, or 10 hours each; and bar mill employees work turns of 8, 9, 10, 11, or 12 hours each. In addition to the inconstant length of a turn as shown above there is another condition, especially pronounced in dull periods, which affects the average number of hours in a turn, that of working a shorter turn than is customary in order that work sufficient for a few days only may be extended over a longer period, the employees preferring part-time work for a week to full time for a few days followed by a complete shutdown.

It will be seen, therefore, that there is no *standard* turn for the iron and steel industry as a whole, and even if one were created arbitrarily to attempt to conform all the odd turns to it would present insuperable difficulties. The turns tabulated simply indicate the total number of separate days when the several crews of each department worked, irrespective of the number of hours worked each day.

Identical plants were included in each of the 24 months of the period, hence the figures are comparable from month to month. Separate computations were made of the facts reported for each plant in a district, but only the monthly totals for each district are presented in the tables.

The maximum number of turns *possible* is the total number of turns that could be made in a month by the several plants reported, if no shutdowns were made any day for any reason, the number for each plant having been computed on the basis of the number of turns per day under the plan under which it operates. The total number of turns customarily not worked on Saturdays, Sundays, and holidays

is next presented, followed by the percentage which that total is of the maximum number of turns possible.

The aggregate numbers of turns *customarily* worked were obtained by deducting the turns customarily not worked on Saturdays, Sundays, and holidays from the maximum possible turns. The number of turns customarily worked were in turn separated into turns *actually worked* and turns down (not worked) owing to slack work or to all other causes. The actual number of turns worked is stated, and the table also shows the percentages that this actual number of turns worked and the actual number of turns down, in either group, are of the aggregate number of turns customarily worked.

The total of the pay rolls in each department is the total amount of the pay rolls of the various plants reported for each month.

Occasionally a plant changed its custom of working from a two-turn to a three-turn basis, or vice versa, and this fact accounts for differences in the maximum possible turns in two months of equal lengths.

#### FULL-TIME FORCE.

Table 9 shows the full complement of employees necessary to operate all the units of each plant on a regular full-time basis.

Counting each department of each plant as a separate and distinct working organization, there are 227 plants included in this report, and to fully man them on a 100 per cent time and capacity basis would require 59,752 men. Table 11 shows that 48,140 men were employed in these 227 plants in May, 1915. In other words the plants, as operated in May, 1915, were using 81 per cent of the number of employees that would have been required had they been operating their entire equipment on a full-time basis.

TABLE 9.—NUMBER OF EMPLOYEES NECESSARY TO OPERATE THE ENTIRE EQUIPMENT OF THE TOTAL PLANTS IN EACH DEPARTMENT ON FULL TIME, BY DISTRICTS, MAY, 1915.

| Department.                    | District. |                 |             |                 |                              |                 |           |                 | Total.  |                 |
|--------------------------------|-----------|-----------------|-------------|-----------------|------------------------------|-----------------|-----------|-----------------|---------|-----------------|
|                                | Eastern.  |                 | Pittsburgh. |                 | Great Lakes and Middle West. |                 | Southern. |                 |         |                 |
|                                | Plants.   | Em-<br>ployees. | Plants.     | Em-<br>ployees. | Plants.                      | Em-<br>ployees. | Plants.   | Em-<br>ployees. | Plants. | Em-<br>ployees. |
| Blast furnaces.....            | 6         | 1,367           | 10          | 4,531           | 11                           | 4,050           | 11        | 2,423           | 38      | 12,371          |
| Bessemer converters            |           |                 | 7           | 1,668           | 5                            | 1,131           |           |                 | 12      | 2,799           |
| Open-hearth fur-<br>naces..... | 6         | 1,343           | 6           | 2,282           | 7                            | 1,982           | 3         | 875             | 22      | 6,482           |
| Puddling mills.....            | 9         | 1,817           | 7           | 1,791           | 8                            | 1,041           | 5         | 586             | 29      | 5,235           |
| Blooming mills.....            | 3         | 276             | 10          | 1,416           | 7                            | 851             | 3         | 257             | 23      | 2,800           |
| Plate mills.....               | 3         | 815             | 6           | 1,346           | 4                            | 634             |           |                 | 13      | 2,795           |
| Standard rail mills..          | 2         | 452             | 2           | 693             | 3                            | 1,495           |           |                 | 7       | 2,640           |
| Bar mills.....                 | 15        | 2,075           | 14          | 3,499           | 19                           | 2,698           | 9         | 1,085           | 57      | 9,357           |
| Sheet mills.....               |           |                 | 10          | 5,285           | 5                            | 2,294           |           |                 | 15      | 7,579           |
| Tin-plate mills.....           |           |                 | 6           | 4,575           | 5                            | 3,119           |           |                 | 11      | 7,694           |
| Total.....                     | 44        | 8,145           | 78          | 27,086          | 74                           | 19,295          | 31        | 5,226           | 227     | 59,752          |



## TURNS AND PAY-ROLL TOTALS.

The volume of employment during the period from July, 1913, to June, 1915, in the plants covered, is shown by departments in Table 10. The figures are presented by means of monthly totals for each geographic district and for all districts combined. Index numbers computed from this table appear in Table 1.

In a few instances the total number of plants, or number of separate units, may not agree with such totals as presented in the regular wage tables of a department. These variations may be explained by using bar mills as an illustration. The table of plants and units covered by this report (Table 12) states that 57 plants and 128 separate mills were represented in the report for the 1914-1915 wage group. The volume of employment table (Table 10) shows 58 plants and 131 mills. By following the comparison back to the several districts it will be found that the difference is in the Eastern district. In this district one plant having three separate bar mills, which was reported for the 1913-1914 group, was not in operation in 1915 owing to lack of orders, and was omitted therefore from the 1914-1915 wage group; but to have omitted it from the table showing volume of employment would have unjustifiably lessened the per cent of slack work in that study.

The first section of the volume of employment table concerns the blast-furnace department. The totals for July, 1913, show that 39 plants, having 134 stacks, were covered. The maximum number of turns *possible* in the month was  $134 \times 31 \times 2 = 8,308$ , and, as the operation of a blast furnace is continuous, the aggregate turns customarily worked is the same. All the 134 stacks were not in operation during the entire month, however, and the turns *actually made* in the 39 plants were 7,102, or only 85 per cent of the 8,308 turns customarily possible. The turns down were equally divided between slack work and all other causes combined, each being 7 per cent of the aggregate turns customarily possible. The number of turns down is not stated, only the per cents computed therefrom being shown. All per cents in these tables are computed to the nearest whole number, hence the sum of those in the three columns may add one point above or below 100. The total pay rolls in July was \$846,737, but this amount represents 35 plants only, as the pay roll totals of four plants were not obtainable.

The next month, August, 1913, had the same number of possible and customary turns as July, but the number of turns actually made by the 39 plants was less in August than in July, being 7,012, or only 84 per cent of the customary full number. Nine per cent of turns were lost on account of slack work and 6 per cent from all other causes combined. The pay-roll total was a little larger than in July, being \$852,865 for the same 35 plants as reported in July.

TABLE 10.—TURNS POSSIBLE, TURNS WORKED, AND TOTAL PAY ROLL IN EACH DISTRICT, BY MONTHS, JULY, 1913, TO JUNE, 1915.

[The abbreviation "G. L. and M. W." in this table stands for "Great Lakes and Middle West."]

## BLAST FURNACES.

| Year, month, and district. | Number of plants and of stacks, converters, furnaces, or mills. |         | Turns possible in period: Maximum number. | Turns customarily not worked (Saturdays, Sundays, and holidays). |        | Turns customarily worked in period. |                  |    |                               | Total pay roll. |          |             |
|----------------------------|-----------------------------------------------------------------|---------|-------------------------------------------|------------------------------------------------------------------|--------|-------------------------------------|------------------|----|-------------------------------|-----------------|----------|-------------|
|                            |                                                                 |         |                                           |                                                                  |        | Aggregate number.                   | Actually worked. |    | Per cent not worked owing to— |                 |          |             |
|                            |                                                                 |         |                                           |                                                                  |        |                                     |                  |    |                               |                 |          | Slack work. |
|                            | Plants.                                                         | Stacks. |                                           | No.                                                              | P. ct. | No.                                 | P. ct.           |    |                               |                 |          |             |
| 1913.                      |                                                                 |         |                                           |                                                                  |        |                                     |                  |    |                               |                 |          |             |
| July. Eastern .....        | 7                                                               | 17      | 1,054                                     |                                                                  |        | 1,054                               | 806              | 76 | 12                            | 12              | \$90,638 |             |
| Pittsburgh .....           | 10                                                              | 47      | 2,914                                     |                                                                  |        | 2,914                               | 2,710            | 93 |                               | 7               | 354,213  |             |
| G. L. and M. W. ....       | 11                                                              | 47      | 2,914                                     |                                                                  |        | 2,914                               | 2,386            | 82 | 13                            | 5               | 314,525  |             |
| Southern .....             | 11                                                              | 23      | 1,426                                     |                                                                  |        | 1,426                               | 1,200            | 84 | 9                             | 7               | 187,361  |             |
| Total .....                | 39                                                              | 134     | 8,308                                     |                                                                  |        | 8,308                               | 7,102            | 85 | 7                             | 7               | 1846,737 |             |
| Aug. Eastern .....         | 7                                                               | 17      | 1,054                                     |                                                                  |        | 1,054                               | 714              | 68 | 17                            | 15              | 89,167   |             |
| Pittsburgh .....           | 10                                                              | 47      | 2,914                                     |                                                                  |        | 2,914                               | 2,752            | 94 | 2                             | 4               | 352,524  |             |
| G. L. and M. W. ....       | 11                                                              | 47      | 2,914                                     |                                                                  |        | 2,914                               | 2,364            | 81 | 13                            | 6               | 320,452  |             |
| Southern .....             | 11                                                              | 23      | 1,426                                     |                                                                  |        | 1,426                               | 1,182            | 83 | 13                            | 4               | 190,722  |             |
| Total .....                | 39                                                              | 134     | 8,308                                     |                                                                  |        | 8,308                               | 7,012            | 84 | 9                             | 6               | 1852,865 |             |
| Sept. Eastern .....        | 7                                                               | 17      | 1,020                                     |                                                                  |        | 1,020                               | 660              | 65 | 23                            | 12              | 88,424   |             |
| Pittsburgh .....           | 10                                                              | 48      | 2,864                                     |                                                                  |        | 2,864                               | 2,588            | 90 | 2                             | 8               | 338,057  |             |
| G. L. and M. W. ....       | 11                                                              | 47      | 2,820                                     |                                                                  |        | 2,820                               | 2,143            | 76 | 14                            | 10              | 308,693  |             |
| Southern .....             | 11                                                              | 23      | 1,380                                     |                                                                  |        | 1,380                               | 1,140            | 83 | 13                            | 4               | 189,448  |             |
| Total .....                | 39                                                              | 135     | 8,084                                     |                                                                  |        | 8,084                               | 6,531            | 81 | 11                            | 9               | 1824,622 |             |
| Oct. Eastern .....         | 7                                                               | 17      | 1,054                                     |                                                                  |        | 1,054                               | 676              | 64 | 24                            | 12              | 91,609   |             |
| Pittsburgh .....           | 10                                                              | 48      | 2,976                                     |                                                                  |        | 2,976                               | 2,690            | 90 | 6                             | 4               | 341,323  |             |
| G. L. and M. W. ....       | 11                                                              | 47      | 2,914                                     |                                                                  |        | 2,914                               | 1,915            | 66 | 23                            | 11              | 290,819  |             |
| Southern .....             | 11                                                              | 23      | 1,426                                     |                                                                  |        | 1,426                               | 1,230            | 86 | 9                             | 4               | 198,625  |             |
| Total .....                | 39                                                              | 135     | 8,370                                     |                                                                  |        | 8,370                               | 6,511            | 78 | 15                            | 8               | 1822,376 |             |
| Nov. Eastern .....         | 7                                                               | 17      | 1,020                                     |                                                                  |        | 1,020                               | 546              | 54 | 38                            | 9               | 83,096   |             |
| Pittsburgh .....           | 10                                                              | 48      | 2,880                                     |                                                                  |        | 2,880                               | 2,490            | 86 | 7                             | 6               | 306,746  |             |
| G. L. and M. W. ....       | 11                                                              | 47      | 2,820                                     |                                                                  |        | 2,820                               | 1,599            | 57 | 28                            | 15              | 258,077  |             |
| Southern .....             | 11                                                              | 23      | 1,380                                     |                                                                  |        | 1,380                               | 1,122            | 81 | 12                            | 7               | 188,401  |             |
| Total .....                | 39                                                              | 135     | 8,100                                     |                                                                  |        | 8,100                               | 5,757            | 71 | 19                            | 10              | 1736,320 |             |
| Dec. Eastern .....         | 7                                                               | 17      | 1,054                                     |                                                                  |        | 1,054                               | 522              | 50 | 45                            | 6               | 79,875   |             |
| Pittsburgh .....           | 10                                                              | 48      | 2,976                                     |                                                                  |        | 2,976                               | 1,935            | 65 | 21                            | 14              | 272,127  |             |
| G. L. and M. W. ....       | 11                                                              | 47      | 2,914                                     |                                                                  |        | 2,914                               | 1,371            | 47 | 34                            | 19              | 235,660  |             |
| Southern .....             | 11                                                              | 23      | 1,426                                     |                                                                  |        | 1,426                               | 1,114            | 78 | 12                            | 10              | 190,029  |             |
| Total .....                | 39                                                              | 135     | 8,370                                     |                                                                  |        | 8,370                               | 4,942            | 59 | 27                            | 14              | 1677,691 |             |
| 1914.                      |                                                                 |         |                                           |                                                                  |        |                                     |                  |    |                               |                 |          |             |
| Jan. Eastern .....         | 7                                                               | 17      | 1,054                                     |                                                                  |        | 1,054                               | 428              | 41 | 54                            | 6               | 68,240   |             |
| Pittsburgh .....           | 10                                                              | 48      | 2,976                                     |                                                                  |        | 2,976                               | 1,908            | 64 | 19                            | 17              | 273,838  |             |
| G. L. and M. W. ....       | 11                                                              | 47      | 2,914                                     |                                                                  |        | 2,914                               | 1,383            | 47 | 31                            | 21              | 229,145  |             |
| Southern .....             | 11                                                              | 23      | 1,426                                     |                                                                  |        | 1,426                               | 1,116            | 78 | 13                            | 9               | 193,353  |             |
| Total .....                | 39                                                              | 135     | 8,370                                     |                                                                  |        | 8,370                               | 4,835            | 58 | 27                            | 15              | 1664,576 |             |
| Feb. Eastern .....         | 7                                                               | 17      | 952                                       |                                                                  |        | 952                                 | 392              | 41 | 53                            | 6               | 49,207   |             |
| Pittsburgh .....           | 10                                                              | 48      | 2,688                                     |                                                                  |        | 2,688                               | 1,980            | 74 | 15                            | 12              | 270,491  |             |
| G. L. and M. W. ....       | 11                                                              | 47      | 2,632                                     |                                                                  |        | 2,632                               | 1,505            | 57 | 27                            | 16              | 222,429  |             |
| Southern .....             | 11                                                              | 23      | 1,288                                     |                                                                  |        | 1,288                               | 1,014            | 79 | 13                            | 8               | 181,867  |             |
| Total .....                | 39                                                              | 135     | 7,560                                     |                                                                  |        | 7,560                               | 4,891            | 65 | 24                            | 12              | 1623,994 |             |
| Mar. Eastern .....         | 7                                                               | 17      | 1,054                                     |                                                                  |        | 1,054                               | 562              | 53 | 46                            | 1               | 73,310   |             |
| Pittsburgh .....           | 10                                                              | 48      | 2,976                                     |                                                                  |        | 2,976                               | 2,330            | 78 | 15                            | 6               | 301,856  |             |
| G. L. and M. W. ....       | 11                                                              | 47      | 2,914                                     |                                                                  |        | 2,914                               | 1,786            | 61 | 24                            | 14              | 252,286  |             |
| Southern .....             | 11                                                              | 23      | 1,426                                     |                                                                  |        | 1,426                               | 1,130            | 79 | 16                            | 4               | 188,820  |             |
| Total .....                | 39                                                              | 135     | 8,370                                     |                                                                  |        | 8,370                               | 5,808            | 69 | 23                            | 8               | 1716,272 |             |

<sup>1</sup> Not including 4 plants (7 stacks) not reported.<sup>2</sup> 47 stacks previous to Sept. 9.

TABLE 10.—TURNS POSSIBLE, TURNS WORKED, AND TOTAL PAY ROLL IN EACH DISTRICT, BY MONTHS, JULY, 1913, TO JUNE, 1915—Continued.

## BLAST FURNACES—Continued.

| Year, month, and district. |                     | Number of plants and of stacks, converters, furnaces, or mills. |                | Turns possible in period: Maximum number. | Turns customarily not worked (Saturdays, Sundays, and holidays). | Turns customarily worked in period. |                  |               |             | Per cent not worked owing to— |       | Total pay roll. |
|----------------------------|---------------------|-----------------------------------------------------------------|----------------|-------------------------------------------|------------------------------------------------------------------|-------------------------------------|------------------|---------------|-------------|-------------------------------|-------|-----------------|
|                            |                     |                                                                 |                |                                           |                                                                  | Aggregate number.                   | Actually worked. |               |             |                               |       |                 |
|                            |                     |                                                                 |                |                                           |                                                                  |                                     |                  |               | Slack work. | All other causes.             |       |                 |
| 1914.                      |                     | <i>Plants.</i>                                                  | <i>Stacks.</i> |                                           | <i>No.</i>                                                       | <i>P. ct.</i>                       | <i>No.</i>       | <i>P. ct.</i> |             |                               |       |                 |
| Apr.                       | Eastern.....        | 7                                                               | 17             | 1,020                                     |                                                                  |                                     | 1,020            | 660           | 65          | 35                            | ..... | \$76,182        |
|                            | Pittsburgh.....     | 10                                                              | 48             | 2,880                                     |                                                                  |                                     | 2,880            | 2,114         | 73          | 19                            | 8     | 274,318         |
|                            | G. L. and M. W..... | 11                                                              | 47             | 2,820                                     |                                                                  |                                     | 2,820            | 1,792         | 64          | 23                            | 13    | 242,636         |
|                            | Southern.....       | 11                                                              | 23             | 1,380                                     |                                                                  |                                     | 1,380            | 924           | 67          | 29                            | 4     | 178,615         |
|                            | Total.....          | 39                                                              | 135            | 8,100                                     |                                                                  |                                     | 8,100            | 5,490         | 68          | 24                            | 8     | 1 671,751       |
| May.                       | Eastern.....        | 7                                                               | 17             | 1,054                                     |                                                                  |                                     | 1,054            | 666           | 63          | 37                            | ..... | 77,494          |
|                            | Pittsburgh.....     | 10                                                              | 48             | 2,976                                     |                                                                  |                                     | 2,976            | 1,935         | 65          | 26                            | 9     | 272,331         |
|                            | G. L. and M. W..... | 11                                                              | 47             | 2,914                                     |                                                                  |                                     | 2,914            | 1,732         | 59          | 23                            | 17    | 240,652         |
|                            | Southern.....       | 11                                                              | 23             | 1,426                                     |                                                                  |                                     | 1,426            | 930           | 65          | 30                            | 4     | 182,407         |
|                            | Total.....          | 39                                                              | 135            | 8,370                                     |                                                                  |                                     | 8,370            | 5,263         | 63          | 27                            | 10    | 1 672,884       |
| June.                      | Eastern.....        | 7                                                               | 17             | 1,020                                     |                                                                  |                                     | 1,020            | 540           | 53          | 41                            | 6     | 65,061          |
|                            | Pittsburgh.....     | 10                                                              | 48             | 2,880                                     |                                                                  |                                     | 2,880            | 1,773         | 62          | 26                            | 13    | 254,427         |
|                            | G. L. and M. W..... | 11                                                              | 47             | 2,820                                     |                                                                  |                                     | 2,820            | 1,477         | 52          | 26                            | 22    | 226,422         |
|                            | Southern.....       | 11                                                              | 23             | 1,380                                     |                                                                  |                                     | 1,380            | 888           | 64          | 31                            | 4     | 175,710         |
|                            | Total.....          | 39                                                              | 135            | 8,100                                     |                                                                  |                                     | 8,100            | 4,678         | 58          | 29                            | 14    | 1 621,620       |
| 1913-14:                   |                     |                                                                 |                |                                           |                                                                  |                                     |                  |               |             |                               |       |                 |
|                            | Eastern.....        | 7                                                               | 17             | 12,410                                    |                                                                  |                                     | 12,410           | 7,172         | 58          | 35                            | 7     | 932,303         |
|                            | Pittsburgh.....     | 10                                                              | 48             | 34,900                                    |                                                                  |                                     | 34,900           | 27,205        | 78          | 13                            | 9     | 3,612,251       |
|                            | G. L. and M. W..... | 11                                                              | 47             | 34,310                                    |                                                                  |                                     | 34,310           | 21,453        | 63          | 23                            | 14    | 3,141,796       |
|                            | Southern.....       | 11                                                              | 23             | 16,790                                    |                                                                  |                                     | 16,790           | 12,990        | 77          | 17                            | 6     | 1,045,358       |
|                            | Total.....          | 39                                                              | 135            | 98,410                                    |                                                                  |                                     | 98,410           | 68,820        | 70          | 20                            | 10    | 1 8,731,708     |
| 1914.                      |                     |                                                                 |                |                                           |                                                                  |                                     |                  |               |             |                               |       |                 |
| July.                      | Eastern.....        | 7                                                               | 17             | 1,054                                     |                                                                  |                                     | 1,054            | 558           | 53          | 41                            | 6     | 75,368          |
|                            | Pittsburgh.....     | 10                                                              | 48             | 2,976                                     |                                                                  |                                     | 2,976            | 2,034         | 68          | 21                            | 14    | 266,299         |
|                            | G. L. and M. W..... | 11                                                              | 47             | 2,914                                     |                                                                  |                                     | 2,914            | 1,574         | 54          | 37                            | 9     | 210,834         |
|                            | Southern.....       | 11                                                              | 23             | 1,426                                     |                                                                  |                                     | 1,426            | 900           | 63          | 26                            | 11    | 167,920         |
|                            | Total.....          | 39                                                              | 135            | 8,370                                     |                                                                  |                                     | 8,370            | 5,066         | 61          | 30                            | 11    | 1 620,421       |
| Aug.                       | Eastern.....        | 7                                                               | 17             | 1,054                                     |                                                                  |                                     | 1,054            | 544           | 52          | 41                            | 7     | 73,440          |
|                            | Pittsburgh.....     | 10                                                              | 48             | 2,976                                     |                                                                  |                                     | 2,976            | 2,098         | 70          | 23                            | 7     | 270,366         |
|                            | G. L. and M. W..... | 11                                                              | 47             | 2,914                                     |                                                                  |                                     | 2,914            | 1,573         | 54          | 39                            | 7     | 208,589         |
|                            | Southern.....       | 11                                                              | 23             | 1,426                                     |                                                                  |                                     | 1,426            | 1,012         | 71          | 26                            | 3     | 177,219         |
|                            | Total.....          | 39                                                              | 135            | 8,370                                     |                                                                  |                                     | 8,370            | 5,227         | 62          | 31                            | 6     | 1 629,614       |
| Sept.                      | Eastern.....        | 7                                                               | 17             | 1,020                                     |                                                                  |                                     | 1,020            | 424           | 42          | 41                            | 17    | 69,183          |
|                            | Pittsburgh.....     | 10                                                              | 48             | 2,880                                     |                                                                  |                                     | 2,880            | 1,972         | 68          | 24                            | 7     | 256,714         |
|                            | G. L. and M. W..... | 11                                                              | 47             | 2,820                                     |                                                                  |                                     | 2,820            | 1,420         | 50          | 41                            | 9     | 190,601         |
|                            | Southern.....       | 11                                                              | 23             | 1,380                                     |                                                                  |                                     | 1,380            | 982           | 71          | 26                            | 3     | 179,015         |
|                            | Total.....          | 39                                                              | 135            | 8,100                                     |                                                                  |                                     | 8,100            | 4,798         | 59          | 33                            | 8     | 1 595,513       |
| Oct.                       | Eastern.....        | 7                                                               | 17             | 1,054                                     |                                                                  |                                     | 1,054            | 442           | 42          | 41                            | 17    | 67,392          |
|                            | Pittsburgh.....     | 10                                                              | 48             | 2,976                                     |                                                                  |                                     | 2,976            | 1,758         | 59          | 32                            | 9     | 237,750         |
|                            | G. L. and M. W..... | 11                                                              | 47             | 2,914                                     |                                                                  |                                     | 2,914            | 1,380         | 47          | 44                            | 9     | 183,362         |
|                            | Southern.....       | 11                                                              | 23             | 1,426                                     |                                                                  |                                     | 1,426            | 992           | 70          | 26                            | 4     | 177,734         |
|                            | Total.....          | 39                                                              | 135            | 8,370                                     |                                                                  |                                     | 8,370            | 4,572         | 55          | 36                            | 9     | 1 566,238       |
| Nov.                       | Eastern.....        | 7                                                               | 17             | 1,020                                     |                                                                  |                                     | 1,020            | 398           | 39          | 44                            | 17    | 62,740          |
|                            | Pittsburgh.....     | 10                                                              | 48             | 2,880                                     |                                                                  |                                     | 2,880            | 1,445         | 50          | 35                            | 14    | 199,435         |
|                            | G. L. and M. W..... | 11                                                              | 47             | 2,820                                     |                                                                  |                                     | 2,820            | 1,278         | 45          | 48                            | 7     | 163,952         |
|                            | Southern.....       | 11                                                              | 23             | 1,380                                     |                                                                  |                                     | 1,380            | 916           | 66          | 26                            | 8     | 188,778         |
|                            | Total.....          | 39                                                              | 135            | 8,100                                     |                                                                  |                                     | 8,100            | 4,037         | 50          | 39                            | 11    | 1 494,905       |

<sup>1</sup> Not including 4 plants (7 stacks) not reported.

TABLE 10.—TURNS POSSIBLE, TURNS WORKED, AND TOTAL PAY ROLL IN EACH DISTRICT, BY MONTHS, JULY, 1913, TO JUNE, 1915—Continued.

## BLAST FURNACES—Concluded.

| Year, month, and district. | Number of plants and of stacks, converters, furnaces, or mills. |         | Turns possible in period: Maximum number. | Turns customarily not worked (Saturdays, Sundays, and holidays). | Turns customarily worked in period. |                  |        |                               |    | Total pay roll. |
|----------------------------|-----------------------------------------------------------------|---------|-------------------------------------------|------------------------------------------------------------------|-------------------------------------|------------------|--------|-------------------------------|----|-----------------|
|                            |                                                                 |         |                                           |                                                                  | Aggregate number.                   | Actually worked. |        | Per cent not worked owing to— |    |                 |
|                            |                                                                 |         |                                           |                                                                  |                                     |                  |        |                               |    |                 |
|                            | Plants.                                                         | Stacks. |                                           | No.                                                              | P. ct.                              | No.              | P. ct. |                               |    |                 |
| 1914.                      |                                                                 |         |                                           |                                                                  |                                     |                  |        |                               |    |                 |
| Dec. Eastern.....          | 7                                                               | 17      | 1,054                                     |                                                                  |                                     | 1,054            | 355    | 34                            | 53 | 14              |
| Pittsburgh.....            | 10                                                              | 48      | 2,976                                     |                                                                  |                                     | 2,976            | 1,358  | 46                            | 42 | 13              |
| G. L. and M. W.....        | 11                                                              | 47      | 2,914                                     |                                                                  |                                     | 2,914            | 1,142  | 39                            | 52 | 9               |
| Southern.....              | 11                                                              | 23      | 1,426                                     |                                                                  |                                     | 1,426            | 928    | 65                            | 26 | 9               |
| Total.....                 | 39                                                              | 135     | 8,370                                     |                                                                  |                                     | 8,370            | 3,783  | 45                            | 44 | 11              |
| 1915.                      |                                                                 |         |                                           |                                                                  |                                     |                  |        |                               |    |                 |
| Jan. Eastern.....          | 7                                                               | 17      | 1,054                                     |                                                                  |                                     | 1,054            | 373    | 35                            | 59 | 6               |
| Pittsburgh.....            | 10                                                              | 48      | 2,976                                     |                                                                  |                                     | 2,976            | 1,507  | 51                            | 39 | 10              |
| G. L. and M. W.....        | 11                                                              | 47      | 2,914                                     |                                                                  |                                     | 2,914            | 1,170  | 40                            | 53 | 7               |
| Southern.....              | 11                                                              | 23      | 1,426                                     |                                                                  |                                     | 1,426            | 876    | 61                            | 30 | 9               |
| Total.....                 | 39                                                              | 135     | 8,370                                     |                                                                  |                                     | 8,370            | 3,926  | 47                            | 45 | 8               |
| Feb. Eastern.....          | 7                                                               | 17      | 952                                       |                                                                  |                                     | 952              | 345    | 36                            | 58 | 6               |
| Pittsburgh.....            | 10                                                              | 48      | 2,688                                     |                                                                  |                                     | 2,688            | 1,762  | 66                            | 27 | 7               |
| G. L. and M. W.....        | 11                                                              | 47      | 2,632                                     |                                                                  |                                     | 2,632            | 1,284  | 49                            | 48 | 3               |
| Southern.....              | 11                                                              | 23      | 1,288                                     |                                                                  |                                     | 1,288            | 810    | 63                            | 26 | 11              |
| Total.....                 | 39                                                              | 135     | 7,560                                     |                                                                  |                                     | 7,560            | 4,201  | 56                            | 38 | 6               |
| Mar. Eastern.....          | 7                                                               | 17      | 1,054                                     |                                                                  |                                     | 1,054            | 418    | 40                            | 54 | 6               |
| Pittsburgh.....            | 10                                                              | 48      | 2,976                                     |                                                                  |                                     | 2,976            | 2,165  | 73                            | 22 | 5               |
| G. L. and M. W.....        | 11                                                              | 47      | 2,914                                     |                                                                  |                                     | 2,914            | 1,554  | 53                            | 45 | 2               |
| Southern.....              | 11                                                              | 23      | 1,426                                     |                                                                  |                                     | 1,426            | 876    | 61                            | 26 | 12              |
| Total.....                 | 39                                                              | 135     | 8,370                                     |                                                                  |                                     | 8,370            | 5,013  | 60                            | 35 | 5               |
| Apr. Eastern.....          | 7                                                               | 17      | 1,020                                     |                                                                  |                                     | 1,020            | 420    | 41                            | 53 | 6               |
| Pittsburgh.....            | 10                                                              | 48      | 2,880                                     |                                                                  |                                     | 2,880            | 2,160  | 75                            | 21 | 4               |
| G. L. and M. W.....        | 11                                                              | 47      | 2,820                                     |                                                                  |                                     | 2,820            | 1,688  | 60                            | 38 | 2               |
| Southern.....              | 11                                                              | 23      | 1,380                                     |                                                                  |                                     | 1,380            | 867    | 63                            | 25 | 13              |
| Total.....                 | 39                                                              | 135     | 8,100                                     |                                                                  |                                     | 8,100            | 5,135  | 63                            | 31 | 5               |
| May. Eastern.....          | 7                                                               | 17      | 1,054                                     |                                                                  |                                     | 1,054            | 434    | 41                            | 53 | 6               |
| Pittsburgh.....            | 10                                                              | 48      | 2,976                                     |                                                                  |                                     | 2,976            | 2,268  | 76                            | 20 | 4               |
| G. L. and M. W.....        | 11                                                              | 47      | 2,914                                     |                                                                  |                                     | 2,914            | 1,746  | 60                            | 36 | 4               |
| Southern.....              | 11                                                              | 23      | 1,426                                     |                                                                  |                                     | 1,426            | 958    | 67                            | 26 | 7               |
| Total.....                 | 39                                                              | 135     | 8,370                                     |                                                                  |                                     | 8,370            | 5,406  | 65                            | 31 | 5               |
| June. Eastern.....         | 7                                                               | 17      | 1,020                                     |                                                                  |                                     | 1,020            | 420    | 41                            | 53 | 6               |
| Pittsburgh.....            | 10                                                              | 48      | 2,880                                     |                                                                  |                                     | 2,880            | 2,461  | 85                            | 12 | 3               |
| G. L. and M. W.....        | 11                                                              | 47      | 2,820                                     |                                                                  |                                     | 2,820            | 1,712  | 62                            | 34 | 4               |
| Southern.....              | 11                                                              | 23      | 1,380                                     |                                                                  |                                     | 1,380            | 1,020  | 74                            | 22 | 4               |
| Total.....                 | 39                                                              | 135     | 8,100                                     |                                                                  |                                     | 8,100            | 5,643  | 70                            | 26 | 4               |
| 1914-15:                   |                                                                 |         |                                           |                                                                  |                                     |                  |        |                               |    |                 |
| Eastern.....               | 7                                                               | 17      | 12,410                                    |                                                                  |                                     | 12,410           | 5,131  | 41                            | 49 | 9               |
| Pittsburgh.....            | 10                                                              | 48      | 35,040                                    |                                                                  |                                     | 35,040           | 22,988 | 66                            | 27 | 8               |
| G. L. and M. W.....        | 11                                                              | 47      | 34,310                                    |                                                                  |                                     | 34,310           | 17,551 | 51                            | 43 | 6               |
| Southern.....              | 11                                                              | 23      | 16,790                                    |                                                                  |                                     | 16,790           | 11,137 | 66                            | 26 | 8               |
| Total.....                 | 39                                                              | 135     | 98,550                                    |                                                                  |                                     | 98,550           | 56,807 | 58                            | 35 | 7               |

1 Not including 4 plants (7 stacks) not reported.

TABLE 10.—TURNS POSSIBLE, TURNS WORKED, AND TOTAL PAY ROLL IN EACH DISTRICT, BY MONTHS, JULY, 1913, TO JUNE, 1915—Continued.

## BESSEMER CONVERTERS.

| Year, month, and district. | Number of plants and of stacks, converters, furnaces, or mills. |           | Turns possible in period: Maximum number. | Turns customarily not worked (Saturdays, Sundays, and holidays). |        | Turns customarily worked in period. |                  |         |             | Per cent not worked owing to— |       | Total pay roll. |
|----------------------------|-----------------------------------------------------------------|-----------|-------------------------------------------|------------------------------------------------------------------|--------|-------------------------------------|------------------|---------|-------------|-------------------------------|-------|-----------------|
|                            |                                                                 |           |                                           |                                                                  |        | Aggregate number.                   | Actually worked. |         |             |                               |       |                 |
|                            |                                                                 |           |                                           |                                                                  |        |                                     |                  |         | Slack work. | All other causes.             |       |                 |
| 1913.                      |                                                                 |           |                                           |                                                                  |        |                                     |                  |         |             |                               |       |                 |
| July.                      | Pittsburgh.....                                                 | Plants. 7 | Con- 19                                   | 527                                                              | No. 93 | P. ct. 18                           | 434              | No. 415 | P. ct. 96   | 4                             | (1)   | \$147,446       |
|                            | G. L. and M. W.                                                 | 5         | 13                                        | 310                                                              | 56     | 18                                  | 254              | 245     | 96          | 4                             | ..... | 91,432          |
|                            | Total.....                                                      | 12        | 32                                        | 837                                                              | 149    | 18                                  | 688              | 660     | 96          | 4                             | (1)   | 238,878         |
| Aug.                       | Pittsburgh.....                                                 | 7         | 19                                        | 527                                                              | 85     | 16                                  | 442              | 434     | 98          | 1                             | (1)   | 152,112         |
|                            | G. L. and M. W.                                                 | 5         | 13                                        | 310                                                              | 52     | 17                                  | 258              | 250     | 97          | 3                             | ..... | 90,636          |
|                            | Total.....                                                      | 12        | 32                                        | 837                                                              | 137    | 16                                  | 700              | 684     | 98          | 2                             | (1)   | 242,748         |
| Sept.                      | Pittsburgh.....                                                 | 7         | 19                                        | 510                                                              | 74     | 15                                  | 436              | 432     | 99          | 1                             | ..... | 140,394         |
|                            | G. L. and M. W.                                                 | 5         | 13                                        | 300                                                              | 42     | 14                                  | 258              | 249     | 97          | 3                             | ..... | 87,953          |
|                            | Total.....                                                      | 12        | 32                                        | 810                                                              | 116    | 14                                  | 694              | 681     | 98          | 2                             | ..... | 228,347         |
| Oct.                       | Pittsburgh.....                                                 | 7         | 19                                        | 527                                                              | 68     | 13                                  | 459              | 454     | 99          | 1                             | ..... | 130,199         |
|                            | G. L. and M. W.                                                 | 5         | 13                                        | 310                                                              | 40     | 13                                  | 270              | 270     | 100         | .....                         | ..... | 83,820          |
|                            | Total.....                                                      | 12        | 32                                        | 837                                                              | 108    | 13                                  | 729              | 724     | 99          | 1                             | ..... | 214,019         |
| Nov.                       | Pittsburgh.....                                                 | 7         | 19                                        | 510                                                              | 87     | 17                                  | 423              | 375     | 89          | 11                            | (1)   | 100,772         |
|                            | G. L. and M. W.                                                 | 5         | 13                                        | 300                                                              | 51     | 17                                  | 249              | 215     | 86          | 14                            | ..... | 58,448          |
|                            | Total.....                                                      | 12        | 32                                        | 810                                                              | 138    | 17                                  | 672              | 590     | 88          | 12                            | (1)   | 159,220         |
| Dec.                       | Pittsburgh.....                                                 | 7         | 19                                        | 527                                                              | 87     | 17                                  | 440              | 281     | 64          | 29                            | 8     | 80,615          |
|                            | G. L. and M. W.                                                 | 5         | 13                                        | 310                                                              | 54     | 17                                  | 256              | 153     | 60          | 34                            | 7     | 46,238          |
|                            | Total.....                                                      | 12        | 32                                        | 837                                                              | 141    | 17                                  | 696              | 434     | 62          | 30                            | 7     | 126,853         |
| 1914.                      |                                                                 |           |                                           |                                                                  |        |                                     |                  |         |             |                               |       |                 |
| Jan.                       | Pittsburgh.....                                                 | 7         | 19                                        | 527                                                              | 80     | 15                                  | 447              | 350     | 78          | 21                            | 1     | 95,624          |
|                            | G. L. and M. W.                                                 | 5         | 13                                        | 310                                                              | 40     | 13                                  | 270              | 172     | 64          | 34                            | 2     | 53,806          |
|                            | Total.....                                                      | 12        | 32                                        | 837                                                              | 120    | 14                                  | 717              | 522     | 73          | 26                            | 1     | 149,430         |
| Feb.                       | Pittsburgh.....                                                 | 7         | 19                                        | 476                                                              | 68     | 14                                  | 408              | 407     | 100         | (1)                           | ..... | 114,054         |
|                            | G. L. and M. W.                                                 | 5         | 13                                        | 280                                                              | 40     | 14                                  | 240              | 213     | 89          | 11                            | ..... | 61,251          |
|                            | Total.....                                                      | 12        | 32                                        | 756                                                              | 108    | 14                                  | 648              | 620     | 96          | 4                             | ..... | 175,305         |
| Mar.                       | Pittsburgh.....                                                 | 7         | 19                                        | 527                                                              | 75     | 14                                  | 452              | 441     | 98          | 2                             | (1)   | 119,363         |
|                            | G. L. and M. W.                                                 | 5         | 13                                        | 310                                                              | 50     | 16                                  | 260              | 230     | 88          | 12                            | ..... | 61,393          |
|                            | Total.....                                                      | 12        | 32                                        | 837                                                              | 125    | 15                                  | 712              | 671     | 94          | 6                             | (1)   | 180,756         |
| Apr.                       | Pittsburgh.....                                                 | 7         | 19                                        | 510                                                              | 68     | 13                                  | 442              | 397     | 90          | 8                             | 2     | 95,942          |
|                            | G. L. and M. W.                                                 | 5         | 13                                        | 300                                                              | 40     | 13                                  | 260              | 208     | 80          | 19                            | 1     | 55,816          |
|                            | Total.....                                                      | 12        | 32                                        | 810                                                              | 108    | 13                                  | 702              | 605     | 86          | 12                            | 2     | 151,758         |
| May.                       | Pittsburgh.....                                                 | 7         | 19                                        | 527                                                              | 89     | 17                                  | 438              | 364     | 83          | 15                            | 2     | 77,266          |
|                            | G. L. and M. W.                                                 | 5         | 13                                        | 310                                                              | 50     | 16                                  | 260              | 167     | 64          | 27                            | 9     | 47,571          |
|                            | Total.....                                                      | 12        | 32                                        | 837                                                              | 139    | 17                                  | 698              | 531     | 76          | 19                            | 5     | 124,837         |
| June.                      | Pittsburgh.....                                                 | 7         | 19                                        | 510                                                              | 68     | 13                                  | 442              | 378     | 86          | 14                            | (1)   | 83,413          |
|                            | G. L. and M. W.                                                 | 5         | 13                                        | 300                                                              | 40     | 13                                  | 260              | 167     | 64          | 26                            | 10    | 47,957          |
|                            | Total.....                                                      | 12        | 32                                        | 810                                                              | 108    | 13                                  | 702              | 545     | 78          | 18                            | 4     | 131,370         |
| 1913-14:                   |                                                                 |           |                                           |                                                                  |        |                                     |                  |         |             |                               |       |                 |
|                            | Pittsburgh.....                                                 | 7         | 19                                        | 6,205                                                            | 942    | 15                                  | 5,263            | 4,728   | 90          | 9                             | 1     | 1,337,200       |
|                            | G. L. and M. W.                                                 | 5         | 13                                        | 3,650                                                            | 555    | 15                                  | 3,095            | 2,539   | 82          | 15                            | 2     | 786,321         |
|                            | Total.....                                                      | 12        | 32                                        | 9,855                                                            | 1,497  | 15                                  | 8,358            | 7,267   | 87          | 11                            | 2     | 2,123,521       |

<sup>1</sup> Less than one-half of 1 per cent.

TABLE 10.—TURNS POSSIBLE, TURNS WORKED, AND TOTAL PAY ROLL IN EACH DISTRICT, BY MONTHS, JULY, 1913, TO JUNE, 1915—Continued.

## BESSEMER CONVERTERS—Concluded.

| Year, month, and district. | Number of plants and of stacks, converters, furnaces, or mills. |                  | Turns possible in period: Maximum number. | Turns customarily not worked (Saturdays, Sundays, and holidays). |        | Turns customarily worked in period. |                  |        |                               |       |             | Total pay roll. |
|----------------------------|-----------------------------------------------------------------|------------------|-------------------------------------------|------------------------------------------------------------------|--------|-------------------------------------|------------------|--------|-------------------------------|-------|-------------|-----------------|
|                            |                                                                 |                  |                                           |                                                                  |        | Ag-<br>gre-<br>gate<br>num-<br>ber. | Actually worked. |        | Per cent not worked owing to— |       |             |                 |
|                            |                                                                 |                  |                                           |                                                                  |        |                                     |                  |        |                               |       | Slack work. |                 |
|                            | Plants.                                                         | Con-<br>verters. |                                           | No.                                                              | P. ct. |                                     | No.              | P. ct. |                               |       |             |                 |
| 1914.                      |                                                                 |                  |                                           |                                                                  |        |                                     |                  |        |                               |       |             |                 |
| July. Pittsburgh.....      | 7                                                               | 19               | 527                                       | 83                                                               | 16     | 444                                 | 386              | 87     | 11                            | 2     | \$89,250    |                 |
| G. L. and M. W.            | 5                                                               | 13               | 310                                       | 50                                                               | 16     | 260                                 | 198              | 76     | 24                            | ..... | 53,507      |                 |
| Total.....                 | 12                                                              | 32               | 837                                       | 133                                                              | 16     | 704                                 | 584              | 83     | 16                            | 1     | 142,757     |                 |
| Aug. Pittsburgh.....       | 7                                                               | 19               | 527                                       | 85                                                               | 16     | 442                                 | 395              | 89     | 11                            | ..... | 88,622      |                 |
| G. L. and M. W.            | 5                                                               | 13               | 310                                       | 52                                                               | 17     | 258                                 | 160              | 62     | 38                            | ..... | 46,026      |                 |
| Total.....                 | 12                                                              | 32               | 837                                       | 137                                                              | 16     | 700                                 | 555              | 79     | 21                            | ..... | 134,648     |                 |
| Sept. Pittsburgh.....      | 7                                                               | 19               | 510                                       | 75                                                               | 15     | 435                                 | 374              | 86     | 14                            | ..... | 82,965      |                 |
| G. L. and M. W.            | 5                                                               | 13               | 300                                       | 47                                                               | 16     | 253                                 | 174              | 69     | 31                            | ..... | 44,038      |                 |
| Total.....                 | 12                                                              | 32               | 810                                       | 122                                                              | 15     | 688                                 | 548              | 80     | 20                            | ..... | 127,003     |                 |
| Oct. Pittsburgh.....       | 7                                                               | 19               | 527                                       | 78                                                               | 15     | 449                                 | 367              | 82     | 18                            | ..... | 79,890      |                 |
| G. L. and M. W.            | 5                                                               | 13               | 310                                       | 41                                                               | 13     | 269                                 | 158              | 59     | 41                            | ..... | 40,926      |                 |
| Total.....                 | 12                                                              | 32               | 837                                       | 119                                                              | 14     | 718                                 | 525              | 73     | 27                            | ..... | 120,816     |                 |
| Nov. Pittsburgh.....       | 7                                                               | 19               | 510                                       | 77                                                               | 15     | 433                                 | 253              | 58     | 42                            | ..... | 55,791      |                 |
| G. L. and M. W.            | 5                                                               | 13               | 300                                       | 51                                                               | 17     | 249                                 | 134              | 54     | 46                            | ..... | 30,885      |                 |
| Total.....                 | 12                                                              | 32               | 810                                       | 128                                                              | 16     | 682                                 | 387              | 57     | 43                            | ..... | 86,676      |                 |
| Dec. Pittsburgh.....       | 7                                                               | 19               | 527                                       | 90                                                               | 17     | 437                                 | 277              | 63     | 37                            | ..... | 59,602      |                 |
| G. L. and M. W.            | 5                                                               | 13               | 310                                       | 54                                                               | 17     | 256                                 | 128              | 50     | 46                            | 4     | 34,687      |                 |
| Total.....                 | 12                                                              | 32               | 837                                       | 144                                                              | 17     | 693                                 | 405              | 58     | 40                            | 1     | 94,289      |                 |
| 1915.                      |                                                                 |                  |                                           |                                                                  |        |                                     |                  |        |                               |       |             |                 |
| Jan. Pittsburgh.....       | 7                                                               | 19               | 527                                       | 87                                                               | 17     | 440                                 | 350              | 80     | 20                            | ..... | 79,133      |                 |
| G. L. and M. W.            | 5                                                               | 13               | 310                                       | 50                                                               | 16     | 260                                 | 148              | 57     | 40                            | 3     | 40,545      |                 |
| Total.....                 | 12                                                              | 32               | 837                                       | 137                                                              | 16     | 700                                 | 498              | 71     | 28                            | 1     | 119,678     |                 |
| Feb. Pittsburgh.....       | 7                                                               | 19               | 476                                       | 68                                                               | 14     | 408                                 | 365              | 89     | 10                            | 1     | 89,448      |                 |
| G. L. and M. W.            | 5                                                               | 13               | 280                                       | 40                                                               | 14     | 240                                 | 174              | 73     | 28                            | ..... | 45,303      |                 |
| Total.....                 | 12                                                              | 32               | 756                                       | 108                                                              | 14     | 648                                 | 539              | 83     | 16                            | (1)   | 134,751     |                 |
| Mar. Pittsburgh.....       | 7                                                               | 19               | 527                                       | 68                                                               | 13     | 459                                 | 409              | 89     | 11                            | ..... | 95,674      |                 |
| G. L. and M. W.            | 5                                                               | 13               | 310                                       | 40                                                               | 13     | 270                                 | 207              | 77     | 23                            | ..... | 52,679      |                 |
| Total.....                 | 12                                                              | 32               | 837                                       | 108                                                              | 13     | 729                                 | 616              | 84     | 16                            | ..... | 148,353     |                 |
| Apr. Pittsburgh.....       | 7                                                               | 19               | 510                                       | 68                                                               | 13     | 442                                 | 386              | 87     | 13                            | ..... | 86,807      |                 |
| G. L. and M. W.            | 5                                                               | 13               | 300                                       | 40                                                               | 13     | 260                                 | 215              | 83     | 17                            | ..... | 52,568      |                 |
| Total.....                 | 12                                                              | 32               | 810                                       | 108                                                              | 13     | 702                                 | 601              | 86     | 14                            | ..... | 139,375     |                 |
| May. Pittsburgh.....       | 7                                                               | 19               | 527                                       | 87                                                               | 17     | 440                                 | 417              | 95     | 5                             | ..... | 92,190      |                 |
| G. L. and M. W.            | 5                                                               | 13               | 310                                       | 50                                                               | 16     | 260                                 | 232              | 89     | 11                            | ..... | 57,731      |                 |
| Total.....                 | 12                                                              | 32               | 837                                       | 137                                                              | 16     | 700                                 | 649              | 93     | 7                             | ..... | 149,921     |                 |
| June. Pittsburgh.....      | 7                                                               | 19               | 510                                       | 68                                                               | 13     | 442                                 | 428              | 97     | 3                             | ..... | 98,473      |                 |
| G. L. and M. W.            | 5                                                               | 13               | 300                                       | 40                                                               | 13     | 260                                 | 238              | 92     | 8                             | ..... | 58,758      |                 |
| Total.....                 | 12                                                              | 32               | 810                                       | 108                                                              | 13     | 702                                 | 666              | 95     | 5                             | ..... | 157,231     |                 |
| 1914-15:                   |                                                                 |                  |                                           |                                                                  |        |                                     |                  |        |                               |       |             |                 |
| Pittsburgh.....            | 7                                                               | 19               | 6,205                                     | 934                                                              | 15     | 5,271                               | 4,407            | 84     | 16                            | (1)   | 997,845     |                 |
| G. L. and M. W.            | 5                                                               | 13               | 3,650                                     | 555                                                              | 15     | 3,095                               | 2,166            | 70     | 29                            | 1     | 557,653     |                 |
| Total.....                 | 12                                                              | 32               | 9,855                                     | 1,489                                                            | 15     | 8,366                               | 6,573            | 79     | 21                            | (1)   | 1,555,498   |                 |

<sup>1</sup> Less than one-half of 1 per cent.

TABLE 10.—TURNS POSSIBLE, TURNS WORKED, AND TOTAL PAY ROLL IN EACH DISTRICT, BY MONTHS, JULY, 1913, TO JUNE, 1915—Continued.

## OPEN-HEARTH FURNACES.

| Year, month, and district. |                      | Number of plants and of stacks, converters, furnaces, or mills. |           | Turns possible in period: Maximum number. | Turns customarily not worked (Saturdays, Sundays, and holidays). |        | Turns customarily worked in period. |                  |        |                               | Total pay roll. |          |             |
|----------------------------|----------------------|-----------------------------------------------------------------|-----------|-------------------------------------------|------------------------------------------------------------------|--------|-------------------------------------|------------------|--------|-------------------------------|-----------------|----------|-------------|
|                            |                      |                                                                 |           |                                           |                                                                  |        | Aggregate number.                   | Actually worked. |        | Per cent not worked owing to— |                 |          |             |
|                            |                      |                                                                 |           |                                           |                                                                  |        |                                     |                  |        |                               |                 |          | Slack work. |
|                            |                      | Plants.                                                         | Furnaces. |                                           | No.                                                              | P. ct. |                                     | No.              | P. ct. |                               |                 |          |             |
| 1913.                      |                      |                                                                 |           |                                           |                                                                  |        |                                     |                  |        |                               |                 |          |             |
| July.                      | Eastern.....         | 6                                                               | 46        | 2,852                                     | 396                                                              | 14     | 2,456                               | 1,975            | 80     | 4                             | 16              | \$37,476 |             |
|                            | Pittsburgh.....      | 6                                                               | 89        | 5,518                                     | 776                                                              | 14     | 4,742                               | 4,424            | 93     | 2                             | 4               | 192,090  |             |
|                            | G. L. and M. W. .... | 7                                                               | 73        | 4,526                                     | 519                                                              | 11     | 4,007                               | 3,042            | 76     | 12                            | 12              | 165,033  |             |
|                            | Southern.....        | 3                                                               | 20        | 1,240                                     | 96                                                               | 8      | 1,144                               | 642              | 56     | 27                            | 17              | 50,740   |             |
|                            | Total.....           | 22                                                              | 228       | 14,136                                    | 1,787                                                            | 13     | 12,349                              | 10,083           | 82     | 8                             | 10              | 495,339  |             |
| Aug.                       | Eastern.....         | 6                                                               | 46        | 2,852                                     | 340                                                              | 12     | 2,512                               | 1,951            | 78     | 14                            | 8               | 85,363   |             |
|                            | Pittsburgh.....      | 6                                                               | 89        | 5,518                                     | 690                                                              | 13     | 4,828                               | 4,531            | 94     | 2                             | 4               | 196,401  |             |
|                            | G. L. and M. W. .... | 7                                                               | 73        | 4,526                                     | 434                                                              | 10     | 4,092                               | 3,297            | 81     | 12                            | 7               | 175,809  |             |
|                            | Southern.....        | 3                                                               | 20        | 1,240                                     | 110                                                              | 9      | 1,130                               | 652              | 58     | 24                            | 18              | 52,406   |             |
|                            | Total.....           | 22                                                              | 228       | 14,136                                    | 1,574                                                            | 11     | 12,562                              | 10,431           | 83     | 10                            | 7               | 509,979  |             |
| Sept.                      | Eastern.....         | 6                                                               | 46        | 2,760                                     | 286                                                              | 10     | 2,474                               | 1,900            | 77     | 13                            | 11              | 88,307   |             |
|                            | Pittsburgh.....      | 6                                                               | 89        | 5,340                                     | 542                                                              | 10     | 4,798                               | 4,426            | 92     | 4                             | 3               | 192,942  |             |
|                            | G. L. and M. W. .... | 7                                                               | 73        | 4,380                                     | 386                                                              | 9      | 3,994                               | 3,245            | 81     | 13                            | 6               | 165,285  |             |
|                            | Southern.....        | 3                                                               | 20        | 1,200                                     | 88                                                               | 7      | 1,112                               | 547              | 49     | 30                            | 21              | 45,931   |             |
|                            | Total.....           | 22                                                              | 228       | 13,680                                    | 1,302                                                            | 10     | 12,378                              | 10,118           | 82     | 11                            | 7               | 492,465  |             |
| Oct.                       | Eastern.....         | 6                                                               | 47        | 2,856                                     | 279                                                              | 10     | 2,577                               | 1,977            | 77     | 15                            | 8               | 90,184   |             |
|                            | Pittsburgh.....      | 6                                                               | 89        | 5,518                                     | 488                                                              | 9      | 5,030                               | 4,440            | 88     | 8                             | 4               | 197,966  |             |
|                            | G. L. and M. W. .... | 7                                                               | 73        | 4,526                                     | 328                                                              | 7      | 4,198                               | 3,020            | 72     | 22                            | 6               | 151,985  |             |
|                            | Southern.....        | 3                                                               | 20        | 1,240                                     | 88                                                               | 7      | 1,152                               | 581              | 50     | 25                            | 25              | 48,426   |             |
|                            | Total.....           | 22                                                              | 229       | 14,140                                    | 1,183                                                            | 8      | 12,957                              | 10,018           | 77     | 15                            | 7               | 458,561  |             |
| Nov.                       | Eastern.....         | 6                                                               | 47        | 2,820                                     | 347                                                              | 12     | 2,473                               | 1,678            | 68     | 24                            | 8               | 71,898   |             |
|                            | Pittsburgh.....      | 6                                                               | 89        | 5,340                                     | 632                                                              | 12     | 4,708                               | 4,113            | 87     | 7                             | 5               | 180,442  |             |
|                            | G. L. and M. W. .... | 7                                                               | 73        | 4,380                                     | 440                                                              | 10     | 3,940                               | 2,557            | 65     | 28                            | 8               | 123,696  |             |
|                            | Southern.....        | 3                                                               | 20        | 1,200                                     | 122                                                              | 10     | 1,078                               | 465              | 43     | 36                            | 21              | 35,949   |             |
|                            | Total.....           | 22                                                              | 229       | 13,740                                    | 1,541                                                            | 11     | 12,199                              | 8,813            | 72     | 20                            | 8               | 411,985  |             |
| Dec.                       | Eastern.....         | 6                                                               | 47        | 2,914                                     | 402                                                              | 14     | 2,512                               | 1,138            | 45     | 44                            | 11              | 52,208   |             |
|                            | Pittsburgh.....      | 6                                                               | 89        | 5,518                                     | 835                                                              | 15     | 4,683                               | 3,091            | 66     | 26                            | 8               | 135,528  |             |
|                            | G. L. and M. W. .... | 7                                                               | 73        | 4,526                                     | 492                                                              | 11     | 4,034                               | 2,651            | 66     | 24                            | 10              | 124,783  |             |
|                            | Southern.....        | 3                                                               | 20        | 1,240                                     | 114                                                              | 9      | 1,126                               | 391              | 35     | 42                            | 23              | 35,807   |             |
|                            | Total.....           | 22                                                              | 229       | 14,198                                    | 1,843                                                            | 13     | 12,355                              | 7,271            | 59     | 30                            | 11              | 348,326  |             |
| 1914.                      |                      |                                                                 |           |                                           |                                                                  |        |                                     |                  |        |                               |                 |          |             |
| Jan.                       | Eastern.....         | 6                                                               | 47        | 2,914                                     | 348                                                              | 12     | 2,566                               | 1,284            | 50     | 40                            | 10              | 58,863   |             |
|                            | Pittsburgh.....      | 6                                                               | 89        | 5,518                                     | 549                                                              | 10     | 4,969                               | 3,420            | 69     | 19                            | 12              | 153,565  |             |
|                            | G. L. and M. W. .... | 7                                                               | 73        | 4,526                                     | 355                                                              | 8      | 4,171                               | 3,186            | 76     | 17                            | 7               | 137,248  |             |
|                            | Southern.....        | 3                                                               | 20        | 1,240                                     | 88                                                               | 7      | 1,152                               | 409              | 36     | 39                            | 26              | 35,017   |             |
|                            | Total.....           | 22                                                              | 229       | 14,198                                    | 1,340                                                            | 9      | 12,858                              | 8,299            | 65     | 24                            | 11              | 384,693  |             |
| Feb.                       | Eastern.....         | 6                                                               | 47        | 2,632                                     | 272                                                              | 10     | 2,360                               | 1,415            | 60     | 31                            | 9               | 61,177   |             |
|                            | Pittsburgh.....      | 6                                                               | 89        | 4,984                                     | 488                                                              | 10     | 4,496                               | 3,687            | 82     | 7                             | 11              | 165,236  |             |
|                            | G. L. and M. W. .... | 7                                                               | 73        | 4,088                                     | 328                                                              | 8      | 3,760                               | 3,092            | 82     | 12                            | 6               | 140,192  |             |
|                            | Southern.....        | 3                                                               | 20        | 1,120                                     | 88                                                               | 8      | 1,032                               | 521              | 50     | 30                            | 19              | 40,751   |             |
|                            | Total.....           | 22                                                              | 229       | 12,824                                    | 1,176                                                            | 9      | 11,648                              | 8,715            | 75     | 16                            | 10              | 407,356  |             |
| Mar.                       | Eastern.....         | 6                                                               | 47        | 2,914                                     | 306                                                              | 11     | 2,608                               | 1,786            | 68     | 22                            | 10              | 76,621   |             |
|                            | Pittsburgh.....      | 6                                                               | 89        | 5,518                                     | 549                                                              | 10     | 4,969                               | 4,303            | 87     | 6                             | 7               | 189,770  |             |
|                            | G. L. and M. W. .... | 7                                                               | 73        | 4,526                                     | 383                                                              | 8      | 4,143                               | 3,456            | 83     | 12                            | 5               | 160,655  |             |
|                            | Southern.....        | 3                                                               | 20        | 1,240                                     | 110                                                              | 9      | 1,130                               | 532              | 47     | 31                            | 22              | 43,670   |             |
|                            | Total.....           | 22                                                              | 229       | 14,198                                    | 1,348                                                            | 9      | 12,850                              | 10,077           | 78     | 13                            | 8               | 470,716  |             |
| Apr.                       | Eastern.....         | 6                                                               | 47        | 2,820                                     | 272                                                              | 10     | 2,548                               | 1,816            | 71     | 20                            | 8               | 72,213   |             |
|                            | Pittsburgh.....      | 6                                                               | 89        | 5,340                                     | 488                                                              | 9      | 4,852                               | 3,925            | 81     | 15                            | 4               | 171,167  |             |
|                            | G. L. and M. W. .... | 7                                                               | 73        | 4,380                                     | 328                                                              | 7      | 4,052                               | 3,272            | 81     | 14                            | 5               | 156,498  |             |
|                            | Southern.....        | 3                                                               | 20        | 1,200                                     | 88                                                               | 7      | 1,112                               | 567              | 51     | 27                            | 22              | 41,880   |             |
|                            | Total.....           | 22                                                              | 229       | 13,740                                    | 1,176                                                            | 9      | 12,564                              | 9,580            | 76     | 17                            | 7               | 441,758  |             |

TABLE 10.—TURNS POSSIBLE, TURNS WORKED, AND TOTAL PAY ROLL IN EACH DISTRICT, BY MONTHS, JULY, 1913, TO JUNE, 1915—Continued.

## OPEN-HEARTH FURNACES—Continued.

| Year, month, and district. |                      | Number of plants and of stacks, converters, furnaces, or mills. |           | Turns possible in period: Maximum number. | Turns customarily not worked (Saturdays, Sundays, and holidays). |     | Turns customarily worked in period. |                  |    |                               |    |             | Total pay roll. |
|----------------------------|----------------------|-----------------------------------------------------------------|-----------|-------------------------------------------|------------------------------------------------------------------|-----|-------------------------------------|------------------|----|-------------------------------|----|-------------|-----------------|
|                            |                      |                                                                 |           |                                           |                                                                  |     | Aggregate number.                   | Actually worked. |    | Per cent not worked owing to— |    |             |                 |
|                            |                      |                                                                 |           |                                           |                                                                  |     |                                     |                  |    |                               |    | Slack work. |                 |
|                            |                      | Plants.                                                         | Furnaces. | No.                                       | P. ct.                                                           | No. | P. ct.                              |                  |    |                               |    |             |                 |
| 1914.                      |                      |                                                                 |           |                                           |                                                                  |     |                                     |                  |    |                               |    |             |                 |
| May.                       | Eastern.....         | 6                                                               | 47        | 2,914                                     | 347                                                              | 12  | 2,567                               | 1,690            | 66 | 26                            | 8  | \$69,210    |                 |
|                            | Pittsburgh.....      | 6                                                               | 89        | 5,518                                     | 610                                                              | 11  | 4,908                               | 3,849            | 78 | 17                            | 5  | 159,999     |                 |
|                            | G. L. and M. W. .... | 7                                                               | 73        | 4,526                                     | 410                                                              | 9   | 4,116                               | 3,223            | 78 | 16                            | 6  | 151,747     |                 |
|                            | Southern.....        | 3                                                               | 20        | 1,240                                     | 110                                                              | 9   | 1,130                               | 511              | 45 | 33                            | 22 | 39,349      |                 |
|                            | Total.....           | 22                                                              | 229       | 14,198                                    | 1,477                                                            | 10  | 12,721                              | 9,273            | 73 | 20                            | 7  | 420,305     |                 |
| June.                      | Eastern.....         | 6                                                               | 47        | 2,820                                     | 272                                                              | 10  | 2,548                               | 1,542            | 61 | 31                            | 9  | 65,724      |                 |
|                            | Pittsburgh.....      | 6                                                               | 89        | 5,340                                     | 520                                                              | 10  | 4,820                               | 3,856            | 80 | 11                            | 9  | 167,617     |                 |
|                            | G. L. and M. W. .... | 7                                                               | 73        | 4,380                                     | 328                                                              | 7   | 4,052                               | 3,224            | 80 | 13                            | 7  | 148,769     |                 |
|                            | Southern.....        | 3                                                               | 20        | 1,200                                     | 88                                                               | 7   | 1,112                               | 525              | 47 | 33                            | 20 | 41,916      |                 |
|                            | Total.....           | 22                                                              | 229       | 13,740                                    | 1,208                                                            | 9   | 12,532                              | 9,147            | 73 | 18                            | 9  | 424,026     |                 |
| 1913-14:                   |                      |                                                                 |           |                                           |                                                                  |     |                                     |                  |    |                               |    |             |                 |
|                            | Eastern.....         | 6                                                               | 47        | 34,068                                    | 3,867                                                            | 11  | 30,201                              | 20,152           | 67 | 24                            | 10 | 879,244     |                 |
|                            | Pittsburgh.....      | 6                                                               | 89        | 64,970                                    | 7,167                                                            | 11  | 57,803                              | 48,065           | 83 | 10                            | 6  | 2,102,723   |                 |
|                            | G. L. and M. W. .... | 7                                                               | 73        | 53,290                                    | 4,731                                                            | 9   | 48,559                              | 37,265           | 77 | 16                            | 7  | 1,801,700   |                 |
|                            | Southern.....        | 3                                                               | 20        | 14,600                                    | 1,190                                                            | 8   | 13,410                              | 6,343            | 47 | 31                            | 21 | 511,842     |                 |
|                            | Total.....           | 22                                                              | 229       | 166,928                                   | 16,955                                                           | 10  | 149,973                             | 111,825          | 75 | 17                            | 9  | 5,295,509   |                 |
| 1914.                      |                      |                                                                 |           |                                           |                                                                  |     |                                     |                  |    |                               |    |             |                 |
| July.                      | Eastern.....         | 6                                                               | 47        | 2,914                                     | 356                                                              | 12  | 2,558                               | 1,611            | 63 | 28                            | 9  | 72,378      |                 |
|                            | Pittsburgh.....      | 6                                                               | 89        | 5,518                                     | 785                                                              | 14  | 4,733                               | 3,974            | 84 | 5                             | 11 | 174,389     |                 |
|                            | G. L. and M. W. .... | 7                                                               | 73        | 4,526                                     | 473                                                              | 10  | 4,053                               | 3,189            | 79 | 15                            | 6  | 137,153     |                 |
|                            | Southern.....        | 3                                                               | 20        | 1,240                                     | 128                                                              | 10  | 1,112                               | 458              | 41 | 40                            | 18 | 35,630      |                 |
|                            | Total.....           | 22                                                              | 229       | 14,198                                    | 1,742                                                            | 12  | 12,456                              | 9,232            | 74 | 16                            | 10 | 419,550     |                 |
| Aug.                       | Eastern.....         | 6                                                               | 47        | 2,914                                     | 340                                                              | 12  | 2,574                               | 1,461            | 57 | 36                            | 8  | 70,689      |                 |
|                            | Pittsburgh.....      | 6                                                               | 89        | 5,518                                     | 690                                                              | 13  | 4,828                               | 4,247            | 88 | 5                             | 7  | 186,487     |                 |
|                            | G. L. and M. W. .... | 7                                                               | 73        | 4,526                                     | 434                                                              | 10  | 4,092                               | 3,217            | 79 | 15                            | 6  | 143,028     |                 |
|                            | Southern.....        | 3                                                               | 20        | 1,240                                     | 140                                                              | 11  | 1,100                               | 564              | 51 | 30                            | 19 | 42,347      |                 |
|                            | Total.....           | 22                                                              | 229       | 14,198                                    | 1,604                                                            | 11  | 12,594                              | 9,489            | 75 | 17                            | 8  | 442,551     |                 |
| Sept.                      | Eastern.....         | 6                                                               | 47        | 2,820                                     | 286                                                              | 10  | 2,534                               | 1,345            | 53 | 38                            | 9  | 64,063      |                 |
|                            | Pittsburgh.....      | 6                                                               | 89        | 5,340                                     | 542                                                              | 10  | 4,798                               | 4,040            | 84 | 10                            | 6  | 178,216     |                 |
|                            | G. L. and M. W. .... | 7                                                               | 73        | 4,380                                     | 356                                                              | 8   | 4,024                               | 2,975            | 74 | 22                            | 4  | 132,325     |                 |
|                            | Southern.....        | 3                                                               | 20        | 1,200                                     | 112                                                              | 9   | 1,088                               | 492              | 45 | 38                            | 17 | 35,066      |                 |
|                            | Total.....           | 22                                                              | 229       | 13,740                                    | 1,296                                                            | 9   | 12,444                              | 8,852            | 71 | 22                            | 7  | 409,670     |                 |
| Oct.                       | Eastern.....         | 6                                                               | 47        | 2,914                                     | 306                                                              | 11  | 2,608                               | 1,135            | 44 | 50                            | 6  | 56,371      |                 |
|                            | Pittsburgh.....      | 6                                                               | 89        | 5,518                                     | 549                                                              | 10  | 4,969                               | 3,373            | 68 | 26                            | 6  | 149,568     |                 |
|                            | G. L. and M. W. .... | 7                                                               | 73        | 4,526                                     | 361                                                              | 8   | 4,165                               | 2,698            | 65 | 32                            | 3  | 116,086     |                 |
|                            | Southern.....        | 3                                                               | 20        | 1,240                                     | 118                                                              | 10  | 1,122                               | 355              | 32 | 48                            | 20 | 26,529      |                 |
|                            | Total.....           | 22                                                              | 229       | 14,198                                    | 1,334                                                            | 9   | 12,864                              | 7,561            | 59 | 35                            | 6  | 348,554     |                 |
| Nov.                       | Eastern.....         | 6                                                               | 47        | 2,820                                     | 320                                                              | 11  | 2,500                               | 1,014            | 41 | 52                            | 7  | 52,777      |                 |
|                            | Pittsburgh.....      | 6                                                               | 89        | 5,340                                     | 571                                                              | 11  | 4,769                               | 2,380            | 50 | 43                            | 7  | 112,973     |                 |
|                            | G. L. and M. W. .... | 7                                                               | 73        | 4,380                                     | 377                                                              | 9   | 4,003                               | 2,181            | 54 | 41                            | 4  | 94,818      |                 |
|                            | Southern.....        | 3                                                               | 20        | 1,200                                     | 134                                                              | 11  | 1,066                               | 258              | 24 | 63                            | 13 | 21,827      |                 |
|                            | Total.....           | 22                                                              | 229       | 13,740                                    | 1,402                                                            | 10  | 12,338                              | 5,833            | 47 | 46                            | 7  | 282,395     |                 |
| Dec.                       | Eastern.....         | 6                                                               | 47        | 2,914                                     | 415                                                              | 14  | 2,499                               | 855              | 34 | 58                            | 7  | 49,081      |                 |
|                            | Pittsburgh.....      | 6                                                               | 89        | 5,518                                     | 800                                                              | 14  | 4,718                               | 2,796            | 59 | 34                            | 6  | 121,776     |                 |
|                            | G. L. and M. W. .... | 7                                                               | 73        | 4,526                                     | 484                                                              | 11  | 4,042                               | 2,280            | 56 | 40                            | 4  | 92,846      |                 |
|                            | Southern.....        | 3                                                               | 20        | 1,240                                     | 140                                                              | 11  | 1,100                               | 320              | 29 | 58                            | 13 | 24,566      |                 |
|                            | Total.....           | 22                                                              | 229       | 14,198                                    | 1,839                                                            | 13  | 12,359                              | 6,251            | 51 | 43                            | 6  | 288,269     |                 |



TABLE 10.—TURNS POSSIBLE, TURNS WORKED, AND TOTAL PAY ROLL IN EACH DISTRICT, BY MONTHS, JULY, 1913, TO JUNE, 1915—Continued.

## OPEN-HEARTH FURNACES—Concluded.

| Year, month, and district. | Number of plants and of stacks, converters, furnaces, or mills. |           | Turns possible in period: Maximum number. | Turns customarily not worked (Saturdays, Sundays, and holidays). |        | Turns customarily worked in period. |                  |        |                               |    |             | Total pay roll. |
|----------------------------|-----------------------------------------------------------------|-----------|-------------------------------------------|------------------------------------------------------------------|--------|-------------------------------------|------------------|--------|-------------------------------|----|-------------|-----------------|
|                            |                                                                 |           |                                           |                                                                  |        | Aggregate number.                   | Actually worked. |        | Per cent not worked owing to— |    |             |                 |
|                            |                                                                 |           |                                           |                                                                  |        |                                     |                  |        |                               |    | Slack work. |                 |
| 1915.                      | Plants.                                                         | Furnaces. |                                           | No.                                                              | P. ct. |                                     | No.              | P. ct. |                               |    |             |                 |
| Jan. Eastern .....         | 6                                                               | 47        | 2,914                                     | 361                                                              | 12     | 2,553                               | 1,11             | 44     | 47                            | 7  | \$60,407    |                 |
| Pittsburgh .....           | 6                                                               | 89        | 5,518                                     | 610                                                              | 11     | 4,908                               | 3,132            | 64     | 30                            | 6  | 142,636     |                 |
| G. L. and M. W. ....       | 7                                                               | 73        | 4,526                                     | 410                                                              | 9      | 4,116                               | 2,292            | 56     | 32                            | 13 | 94,462      |                 |
| Southern .....             | 3                                                               | 20        | 1,240                                     | 140                                                              | 11     | 1,100                               | 368              | 33     | 54                            | 12 | 27,171      |                 |
| Total .....                | 22                                                              | 229       | 14,198                                    | 1,521                                                            | 11     | 12,677                              | 6,905            | 54     | 36                            | 10 | 324,676     |                 |
| Feb. Eastern .....         | 6                                                               | 47        | 2,632                                     | 272                                                              | 10     | 2,360                               | 1,274            | 54     | 41                            | 5  | 63,948      |                 |
| Pittsburgh .....           | 6                                                               | 89        | 4,984                                     | 488                                                              | 10     | 4,496                               | 3,022            | 67     | 26                            | 6  | 135,181     |                 |
| G. L. and M. W. ....       | 7                                                               | 73        | 4,088                                     | 328                                                              | 8      | 3,760                               | 2,316            | 62     | 28                            | 11 | 98,214      |                 |
| Southern .....             | 3                                                               | 20        | 1,120                                     | 112                                                              | 10     | 1,008                               | 381              | 38     | 43                            | 19 | 28,103      |                 |
| Total .....                | 22                                                              | 229       | 12,824                                    | 1,200                                                            | 9      | 11,624                              | 6,993            | 60     | 31                            | 9  | 325,446     |                 |
| Mar. Eastern .....         | 6                                                               | 47        | 2,914                                     | 279                                                              | 10     | 2,635                               | 1,712            | 65     | 27                            | 8  | 80,400      |                 |
| Pittsburgh .....           | 6                                                               | 89        | 5,518                                     | 488                                                              | 9      | 5,030                               | 3,939            | 78     | 16                            | 5  | 167,791     |                 |
| G. L. and M. W. ....       | 7                                                               | 73        | 4,526                                     | 328                                                              | 7      | 4,198                               | 3,072            | 73     | 21                            | 6  | 124,851     |                 |
| Southern .....             | 3                                                               | 20        | 1,240                                     | 112                                                              | 9      | 1,128                               | 523              | 46     | 38                            | 16 | 38,448      |                 |
| Total .....                | 22                                                              | 229       | 14,198                                    | 1,207                                                            | 9      | 12,991                              | 9,246            | 71     | 22                            | 7  | 411,490     |                 |
| Apr. Eastern .....         | 6                                                               | 47        | 2,820                                     | 272                                                              | 10     | 2,548                               | 1,811            | 71     | 23                            | 6  | 80,747      |                 |
| Pittsburgh .....           | 6                                                               | 89        | 5,340                                     | 488                                                              | 9      | 4,852                               | 3,664            | 76     | 17                            | 7  | 157,431     |                 |
| G. L. and M. W. ....       | 7                                                               | 73        | 4,380                                     | 328                                                              | 7      | 4,052                               | 3,315            | 82     | 14                            | 4  | 136,441     |                 |
| Southern .....             | 3                                                               | 20        | 1,200                                     | 112                                                              | 9      | 1,088                               | 555              | 51     | 36                            | 13 | 37,450      |                 |
| Total .....                | 22                                                              | 229       | 13,740                                    | 1,200                                                            | 9      | 12,540                              | 9,345            | 75     | 19                            | 6  | 412,069     |                 |
| May. Eastern .....         | 6                                                               | 47        | 2,914                                     | 340                                                              | 12     | 2,574                               | 1,866            | 72     | 19                            | 9  | 83,961      |                 |
| Pittsburgh .....           | 6                                                               | 89        | 5,518                                     | 610                                                              | 11     | 4,908                               | 4,192            | 85     | 8                             | 6  | 174,742     |                 |
| G. L. and M. W. ....       | 7                                                               | 73        | 4,526                                     | 410                                                              | 9      | 4,116                               | 3,550            | 86     | 9                             | 5  | 150,796     |                 |
| Southern .....             | 3                                                               | 20        | 1,240                                     | 140                                                              | 11     | 1,100                               | 614              | 56     | 29                            | 16 | 41,089      |                 |
| Total .....                | 22                                                              | 229       | 14,198                                    | 1,500                                                            | 11     | 12,698                              | 10,222           | 81     | 12                            | 7  | 450,588     |                 |
| June. Eastern .....        | 6                                                               | 47        | 2,820                                     | 272                                                              | 10     | 2,548                               | 1,932            | 76     | 18                            | 6  | 86,388      |                 |
| Pittsburgh .....           | 6                                                               | 89        | 5,340                                     | 520                                                              | 10     | 4,820                               | 4,403            | 91     | 1                             | 7  | 189,396     |                 |
| G. L. and M. W. ....       | 7                                                               | 73        | 4,380                                     | 328                                                              | 7      | 4,052                               | 3,393            | 84     | 11                            | 5  | 142,458     |                 |
| Southern .....             | 3                                                               | 20        | 1,200                                     | 112                                                              | 9      | 1,088                               | 577              | 53     | 27                            | 20 | 40,434      |                 |
| Total .....                | 22                                                              | 229       | 13,740                                    | 1,232                                                            | 9      | 12,508                              | 10,305           | 82     | 10                            | 8  | 458,676     |                 |
| 1914-15:                   |                                                                 |           |                                           |                                                                  |        |                                     |                  |        |                               |    |             |                 |
| Eastern .....              | 6                                                               | 47        | 34,310                                    | 3,819                                                            | 11     | 30,491                              | 17,129           | 56     | 36                            | 7  | 821,210     |                 |
| Pittsburgh .....           | 6                                                               | 89        | 64,970                                    | 7,141                                                            | 11     | 57,829                              | 43,162           | 75     | 19                            | 7  | 1,890,586   |                 |
| G. L. and M. W. ....       | 7                                                               | 73        | 53,290                                    | 4,617                                                            | 9      | 48,673                              | 34,478           | 71     | 23                            | 6  | 1,463,478   |                 |
| Southern .....             | 3                                                               | 20        | 14,600                                    | 1,500                                                            | 10     | 13,100                              | 5,465            | 42     | 42                            | 16 | 398,660     |                 |
| Total .....                | 22                                                              | 229       | 167,170                                   | 17,077                                                           | 10     | 150,093                             | 100,234          | 67     | 26                            | 8  | 4,573,934   |                 |

## PUDDLING MILLS.

|                      |    |     |        |        |    |        |        |    |       |    |  |          |
|----------------------|----|-----|--------|--------|----|--------|--------|----|-------|----|--|----------|
| 1913.                |    |     |        |        |    |        |        |    |       |    |  |          |
| July. Eastern.....   | 9  | 289 | 18,476 | 4,780  | 26 | 3,696  | 8,035  | 59 | 29    | 12 |  | \$70,345 |
| Pittsburgh.....      | 7  | 298 | 18,600 | 4,432  | 24 | 14,168 | 1,273  | 9  | ..... | 91 |  | 23,664   |
| G. L. and M. W. .... | 8  | 92  | 7,292  | 1,830  | 25 | 5,462  | 2,383  | 44 | 30    | 26 |  | 44,820   |
| Southern.....        | 5  | 76  | 3,379  | 665    | 20 | 2,714  | 1,299  | 48 | 127   | 25 |  | 42,035   |
| Total.....           | 29 | 755 | 47,747 | 11,707 | 25 | 36,040 | 12,990 | 36 | 118   | 46 |  | 180,894  |

<sup>1</sup> Not including 2 plants not reported.

TABLE 10.—TURNS POSSIBLE, TURNS WORKED, AND TOTAL PAY ROLL IN EACH DISTRICT, BY MONTHS, JULY, 1913, TO JUNE, 1915—Continued.

## PUDDLING MILLS—Continued.

| Year, month, and district. |                      | Number of plants and of stacks, converters, furnaces, or mills. |                  | Turns possible in period: Maximum number. | Turns customarily not worked (Saturdays, Sundays, and holidays). |               | Turns customarily worked in period. |                  |    |             | Per cent not worked owing to— |          | Total pay roll. |
|----------------------------|----------------------|-----------------------------------------------------------------|------------------|-------------------------------------------|------------------------------------------------------------------|---------------|-------------------------------------|------------------|----|-------------|-------------------------------|----------|-----------------|
|                            |                      |                                                                 |                  |                                           |                                                                  |               | Aggregate number.                   | Actually worked. |    |             |                               |          |                 |
|                            |                      |                                                                 |                  |                                           |                                                                  |               |                                     |                  |    | Slack work. | All other causes.             |          |                 |
|                            |                      | <i>Plants.</i>                                                  | <i>Furnaces.</i> |                                           | <i>No.</i>                                                       | <i>P. ct.</i> | <i>No.</i>                          | <i>P. ct.</i>    |    |             |                               |          |                 |
| 1913.                      | Eastern.....         | 9                                                               | 289              | 18,476                                    | 4,939                                                            | 27            | 13,537                              | 8,451            | 62 | 34          | 4                             | \$75,682 |                 |
| Aug.                       | Pittsburgh.....      | 7                                                               | 298              | 18,600                                    | 4,510                                                            | 24            | 14,090                              | 2,682            | 19 | 13          | 68                            | 45,745   |                 |
|                            | G. L. and M. W. .... | 8                                                               | 92               | 7,502                                     | 1,960                                                            | 26            | 5,542                               | 4,357            | 79 | 12          | 9                             | 82,826   |                 |
|                            | Southern.....        | 5                                                               | 76               | 3,379                                     | 790                                                              | 23            | 2,589                               | 1,861            | 72 | 1 21        | 7                             | 43,649   |                 |
|                            | Total.....           | 29                                                              | 755              | 47,957                                    | 12,199                                                           | 25            | 35,758                              | 17,351           | 49 | 1 21        | 30                            | 247,902  |                 |
| Sept.                      | Eastern.....         | 9                                                               | 289              | 17,880                                    | 4,492                                                            | 25            | 13,388                              | 10,626           | 79 | 19          | 2                             | 97,672   |                 |
|                            | Pittsburgh.....      | 7                                                               | 298              | 18,000                                    | 4,086                                                            | 23            | 13,914                              | 3,260            | 23 | 16          | 61                            | 55,653   |                 |
|                            | G. L. and M. W. .... | 8                                                               | 92               | 7,260                                     | 1,794                                                            | 25            | 5,466                               | 4,391            | 80 | 12          | 8                             | 88,374   |                 |
|                            | Southern.....        | 5                                                               | 76               | 3,270                                     | 653                                                              | 20            | 2,617                               | 2,103            | 80 | 1 17        | 3                             | 42,095   |                 |
|                            | Total.....           | 29                                                              | 755              | 46,410                                    | 11,025                                                           | 24            | 35,385                              | 20,380           | 58 | 1 16        | 26                            | 283,794  |                 |
| Oct.                       | Eastern.....         | 9                                                               | 289              | 18,476                                    | 4,012                                                            | 22            | 14,464                              | 12,754           | 88 | 11          | 1                             | 121,312  |                 |
|                            | Pittsburgh.....      | 7                                                               | 298              | 18,600                                    | 3,608                                                            | 19            | 14,992                              | 4,085            | 27 | 17          | 55                            | 68,588   |                 |
|                            | G. L. and M. W. .... | 8                                                               | 92               | 7,502                                     | 1,568                                                            | 21            | 5,934                               | 4,299            | 72 | 16          | 12                            | 91,753   |                 |
|                            | Southern.....        | 5                                                               | 76               | 3,379                                     | 632                                                              | 19            | 2,747                               | 2,110            | 77 | 1 14        | 9                             | 34,668   |                 |
|                            | Total.....           | 29                                                              | 755              | 47,957                                    | 9,820                                                            | 20            | 38,137                              | 23,248           | 61 | 1 14        | 25                            | 316,326  |                 |
| Nov.                       | Eastern.....         | 9                                                               | 289              | 17,880                                    | 4,775                                                            | 27            | 13,105                              | 11,133           | 85 | 14          | 1                             | 106,499  |                 |
|                            | Pittsburgh.....      | 7                                                               | 298              | 18,000                                    | 4,780                                                            | 27            | 13,220                              | 2,805            | 21 | 24          | 55                            | 50,606   |                 |
|                            | G. L. and M. W. .... | 8                                                               | 92               | 7,260                                     | 1,968                                                            | 27            | 5,292                               | 3,150            | 60 | 37          | 3                             | 58,445   |                 |
|                            | Southern.....        | 5                                                               | 76               | 3,270                                     | 790                                                              | 24            | 2,480                               | 1,797            | 72 | 1 10        | 17                            | 29,893   |                 |
|                            | Total.....           | 29                                                              | 755              | 46,410                                    | 12,313                                                           | 27            | 34,097                              | 18,885           | 55 | 1 21        | 23                            | 245,443  |                 |
| Dec.                       | Eastern.....         | 9                                                               | 289              | 18,476                                    | 4,726                                                            | 26            | 13,750                              | 10,173           | 74 | 19          | 7                             | 96,487   |                 |
|                            | Pittsburgh.....      | 7                                                               | 298              | 18,600                                    | 4,677                                                            | 25            | 13,923                              | 4,831            | 35 | 34          | 31                            | 70,456   |                 |
|                            | G. L. and M. W. .... | 8                                                               | 92               | 7,502                                     | 2,050                                                            | 27            | 5,452                               | 3,048            | 56 | 43          | 1                             | 49,860   |                 |
|                            | Southern.....        | 5                                                               | 76               | 3,379                                     | 793                                                              | 23            | 2,586                               | 1,398            | 54 | 1 30        | 16                            | 24,125   |                 |
|                            | Total.....           | 29                                                              | 755              | 47,957                                    | 12,246                                                           | 26            | 35,711                              | 19,450           | 54 | 1 30        | 16                            | 240,928  |                 |
| 1914.                      |                      |                                                                 |                  |                                           |                                                                  |               |                                     |                  |    |             |                               |          |                 |
| Jan.                       | Eastern.....         | 9                                                               | 289              | 18,476                                    | 4,211                                                            | 23            | 14,265                              | 9,844            | 69 | 28          | 3                             | 90,346   |                 |
|                            | Pittsburgh.....      | 7                                                               | 298              | 18,600                                    | 4,108                                                            | 22            | 14,492                              | 5,965            | 41 | 30          | 29                            | 81,931   |                 |
|                            | G. L. and M. W. .... | 8                                                               | 92               | 7,502                                     | 1,778                                                            | 24            | 5,724                               | 3,769            | 66 | 33          | 1                             | 62,216   |                 |
|                            | Southern.....        | 5                                                               | 76               | 3,379                                     | 681                                                              | 20            | 2,698                               | 1,357            | 50 | 1 21        | 28                            | 24,827   |                 |
|                            | Total.....           | 29                                                              | 755              | 47,957                                    | 10,778                                                           | 22            | 37,179                              | 20,935           | 56 | 1 29        | 15                            | 259,320  |                 |
| Feb.                       | Eastern.....         | 9                                                               | 289              | 16,688                                    | 3,708                                                            | 22            | 12,980                              | 11,442           | 88 | 11          | 1                             | 106,408  |                 |
|                            | Pittsburgh.....      | 7                                                               | 298              | 16,800                                    | 3,608                                                            | 21            | 13,192                              | 7,489            | 57 | 19          | 24                            | 93,966   |                 |
|                            | G. L. and M. W. .... | 8                                                               | 92               | 6,776                                     | 1,568                                                            | 23            | 5,208                               | 3,875            | 74 | 23          | 2                             | 68,319   |                 |
|                            | Southern.....        | 5                                                               | 76               | 3,052                                     | 632                                                              | 21            | 2,420                               | 1,333            | 55 | 1 26        | 18                            | 16,089   |                 |
|                            | Total.....           | 29                                                              | 755              | 43,316                                    | 9,516                                                            | 22            | 33,800                              | 24,139           | 71 | 1 17        | 11                            | 284,782  |                 |
| Mar.                       | Eastern.....         | 9                                                               | 289              | 18,476                                    | 4,304                                                            | 23            | 14,172                              | 11,238           | 79 | 18          | 3                             | 107,296  |                 |
|                            | Pittsburgh.....      | 7                                                               | 298              | 18,600                                    | 4,208                                                            | 23            | 14,392                              | 10,820           | 75 | 20          | 5                             | 117,299  |                 |
|                            | G. L. and M. W. .... | 8                                                               | 92               | 7,502                                     | 1,810                                                            | 24            | 5,692                               | 4,124            | 72 | 26          | 2                             | 76,611   |                 |
|                            | Southern.....        | 5                                                               | 76               | 3,379                                     | 741                                                              | 22            | 2,638                               | 1,730            | 66 | 1 21        | 13                            | 29,961   |                 |
|                            | Total.....           | 29                                                              | 755              | 47,957                                    | 11,063                                                           | 23            | 36,894                              | 27,912           | 76 | 1 20        | 4                             | 331,167  |                 |
| Apr.                       | Eastern.....         | 9                                                               | 289              | 17,880                                    | 4,032                                                            | 23            | 13,848                              | 9,578            | 69 | 30          | 1                             | 90,162   |                 |
|                            | Pittsburgh.....      | 7                                                               | 298              | 18,000                                    | 3,608                                                            | 20            | 14,392                              | 10,710           | 74 | 23          | 3                             | 117,365  |                 |
|                            | G. L. and M. W. .... | 8                                                               | 92               | 6,840                                     | 1,456                                                            | 21            | 5,384                               | 3,347            | 62 | 38          | .....                         | 60,329   |                 |
|                            | Southern.....        | 5                                                               | 76               | 3,270                                     | 632                                                              | 19            | 2,638                               | 1,674            | 63 | 1 24        | 12                            | 31,396   |                 |
|                            | Total.....           | 29                                                              | 755              | 45,990                                    | 9,728                                                            | 21            | 36,262                              | 25,309           | 70 | 1 28        | 2                             | 299,252  |                 |

1 Not including 2 plants not reported.

TABLE 10.—TURNS POSSIBLE, TURNS WORKED, AND TOTAL PAY ROLL IN EACH DISTRICT, BY MONTHS, JULY, 1913, TO JUNE, 1915—Continued.

## PUDDLING MILLS—Continued.

| Year, month, and district. | Number of plants and of stacks, converters, furnaces, or mills. |           | Turns possible in period: Maximum number. | Turns customarily not worked (Saturdays, Sundays, and holidays). |        | Turns customarily worked in period. |                  |    |                               |                   | Total pay roll. |
|----------------------------|-----------------------------------------------------------------|-----------|-------------------------------------------|------------------------------------------------------------------|--------|-------------------------------------|------------------|----|-------------------------------|-------------------|-----------------|
|                            |                                                                 |           |                                           |                                                                  |        | Aggregate number.                   | Actually worked. |    | Per cent not worked owing to— |                   |                 |
|                            |                                                                 |           |                                           |                                                                  |        |                                     |                  |    | Slack work.                   | All other causes. |                 |
|                            | Plants.                                                         | Furnaces. |                                           | No.                                                              | P. ct. | No.                                 | P. ct.           |    |                               |                   |                 |
| 1914.                      |                                                                 |           |                                           |                                                                  |        |                                     |                  |    |                               |                   |                 |
| May. Eastern.....          | 9                                                               | 289       | 18, 476                                   | 5, 365                                                           | 29     | 13, 111                             | 7, 726           | 59 | 41                            | .....             | \$74, 146       |
| Pittsburgh.....            | 7                                                               | 298       | 18, 600                                   | 4, 757                                                           | 26     | 13, 843                             | 9, 262           | 67 | 29                            | 4                 | 105, 672        |
| G. L. and M. W.....        | 8                                                               | 92        | 7, 068                                    | 1, 828                                                           | 26     | 5, 240                              | 3, 019           | 58 | 42                            | .....             | 55, 515         |
| Southern.....              | 5                                                               | 76        | 3, 379                                    | 790                                                              | 23     | 2, 589                              | 1, 255           | 52 | 1 28                          | 24                | 22, 297         |
| Total.....                 | 29                                                              | 755       | 47, 523                                   | 12, 740                                                          | 27     | 34, 783                             | 21, 262          | 61 | 1 36                          | 3                 | 257, 630        |
| June. Eastern.....         | 9                                                               | 289       | 17, 880                                   | 4, 488                                                           | 25     | 13, 392                             | 7, 149           | 53 | 46                            | (2)               | 67, 607         |
| Pittsburgh.....            | 7                                                               | 298       | 18, 000                                   | 3, 608                                                           | 20     | 14, 392                             | 9, 674           | 67 | 29                            | 3                 | 99, 310         |
| G. L. and M. W.....        | 8                                                               | 92        | 6, 840                                    | 1, 456                                                           | 21     | 5, 384                              | 2, 724           | 51 | 39                            | 10                | 49, 351         |
| Southern.....              | 5                                                               | 76        | 3, 270                                    | 632                                                              | 19     | 2, 638                              | 1, 069           | 41 | 1 29                          | 31                | 30, 572         |
| Total.....                 | 29                                                              | 755       | 45, 990                                   | 10, 184                                                          | 22     | 35, 806                             | 20, 616          | 58 | 1 37                          | 5                 | 246, 840        |
| 1913-14:                   |                                                                 |           |                                           |                                                                  |        |                                     |                  |    |                               |                   |                 |
| Eastern.....               | 9                                                               | 289       | 217, 540                                  | 53, 832                                                          | 25     | 163, 708                            | 118, 149         | 72 | 25                            | 3                 | 1, 103, 962     |
| Pittsburgh.....            | 7                                                               | 298       | 219, 000                                  | 49, 990                                                          | 23     | 169, 010                            | 72, 856          | 43 | 21                            | 36                | 930, 255        |
| G. L. and M. W.....        | 8                                                               | 92        | 86, 846                                   | 21, 066                                                          | 24     | 65, 780                             | 42, 486          | 65 | 29                            | 6                 | 788, 424        |
| Southern.....              | 5                                                               | 76        | 39, 785                                   | 8, 431                                                           | 21     | 31, 354                             | 18, 986          | 61 | 1 22                          | 17                | 371, 637        |
| Total.....                 | 29                                                              | 755       | 563, 171                                  | 133, 319                                                         | 24     | 429, 852                            | 252, 477         | 59 | 1 24                          | 17                | 3, 194, 278     |
| 1914.                      |                                                                 |           |                                           |                                                                  |        |                                     |                  |    |                               |                   |                 |
| July. Eastern.....         | 9                                                               | 287       | 18, 290                                   | 4, 780                                                           | 26     | 13, 510                             | 4, 641           | 34 | 23                            | 43                | 45, 555         |
| Pittsburgh.....            | 7                                                               | 298       | 18, 600                                   | 3, 932                                                           | 21     | 14, 668                             | 8, 900           | 61 | 14                            | 25                | 82, 417         |
| G. L. and M. W.....        | 8                                                               | 93        | 7, 099                                    | 1, 573                                                           | 22     | 5, 526                              | 2, 392           | 43 | 29                            | 27                | 44, 361         |
| Southern.....              | 5                                                               | 76        | 3, 379                                    | 644                                                              | 19     | 2, 735                              | 831              | 30 | 1 44                          | 26                | 13, 887         |
| Total.....                 | 29                                                              | 754       | 47, 368                                   | 10, 929                                                          | 23     | 36, 439                             | 16, 764          | 46 | 1 22                          | 32                | 186, 220        |
| Aug. Eastern.....          | 9                                                               | 287       | 18, 290                                   | 5, 481                                                           | 26     | 12, 809                             | 6, 745           | 53 | 19                            | 28                | 59, 453         |
| Pittsburgh.....            | 7                                                               | 298       | 18, 600                                   | 4, 510                                                           | 24     | 14, 090                             | 10, 651          | 76 | 23                            | 2                 | 105, 158        |
| G. L. and M. W.....        | 8                                                               | 93        | 7, 099                                    | 1, 835                                                           | 26     | 5, 274                              | 3, 224           | 61 | 39                            | .....             | 64, 014         |
| Southern.....              | 5                                                               | 76        | 3, 379                                    | 790                                                              | 23     | 2, 589                              | 867              | 33 | 1 45                          | 22                | 15, 326         |
| Total.....                 | 29                                                              | 754       | 47, 368                                   | 12, 606                                                          | 26     | 34, 762                             | 21, 487          | 62 | 1 25                          | 13                | 243, 951        |
| Sept. Eastern.....         | 9                                                               | 287       | 17, 700                                   | 4, 749                                                           | 27     | 12, 951                             | 5, 900           | 46 | 29                            | 26                | 49, 609         |
| Pittsburgh.....            | 7                                                               | 298       | 18, 000                                   | 4, 150                                                           | 23     | 13, 850                             | 7, 812           | 56 | 42                            | 1                 | 90, 368         |
| G. L. and M. W.....        | 8                                                               | 93        | 6, 870                                    | 1, 689                                                           | 25     | 5, 181                              | 3, 185           | 61 | 38                            | 1                 | 56, 350         |
| Southern.....              | 5                                                               | 76        | 3, 270                                    | 653                                                              | 20     | 2, 617                              | 759              | 29 | 1 49                          | 22                | 16, 543         |
| Total.....                 | 29                                                              | 754       | 45, 840                                   | 11, 241                                                          | 24     | 34, 599                             | 17, 656          | 51 | 1 37                          | 12                | 212, 870        |
| Oct. Eastern.....          | 9                                                               | 287       | 18, 290                                   | 4, 789                                                           | 26     | 13, 501                             | 2, 772           | 21 | 60                            | 20                | 26, 657         |
| Pittsburgh.....            | 7                                                               | 298       | 18, 600                                   | 3, 910                                                           | 21     | 14, 690                             | 7, 866           | 54 | 44                            | 3                 | 88, 605         |
| G. L. and M. W.....        | 8                                                               | 93        | 7, 099                                    | 1, 596                                                           | 22     | 5, 503                              | 2, 386           | 43 | 52                            | 4                 | 43, 231         |
| Southern.....              | 5                                                               | 76        | 3, 379                                    | 681                                                              | 20     | 2, 698                              | 1, 042           | 39 | 1 38                          | 23                | 20, 396         |
| Total.....                 | 29                                                              | 754       | 47, 368                                   | 10, 976                                                          | 23     | 36, 392                             | 14, 066          | 39 | 1 51                          | 11                | 178, 889        |
| Nov. Eastern.....          | 9                                                               | 287       | 17, 700                                   | 4, 946                                                           | 28     | 12, 754                             | 5, 521           | 43 | 49                            | 8                 | 50, 022         |
| Pittsburgh.....            | 7                                                               | 298       | 18, 000                                   | 4, 478                                                           | 25     | 13, 522                             | 4, 999           | 37 | 62                            | 1                 | 54, 255         |
| G. L. and M. W.....        | 8                                                               | 93        | 6, 870                                    | 1, 831                                                           | 27     | 5, 039                              | 2, 542           | 50 | 48                            | 2                 | 47, 249         |
| Southern.....              | 5                                                               | 76        | 3, 270                                    | 741                                                              | 23     | 2, 529                              | 981              | 37 | 1 55                          | 8                 | 16, 771         |
| Total.....                 | 29                                                              | 754       | 45, 840                                   | 11, 996                                                          | 26     | 33, 844                             | 13, 993          | 41 | 1 54                          | 4                 | 168, 297        |
| Dec. Eastern.....          | 9                                                               | 287       | 18, 290                                   | 4, 880                                                           | 27     | 13, 410                             | 5, 857           | 44 | 56                            | .....             | 53, 194         |
| Pittsburgh.....            | 7                                                               | 298       | 18, 600                                   | 4, 400                                                           | 24     | 14, 200                             | 5, 006           | 35 | 64                            | (2)               | 56, 839         |
| G. L. and M. W.....        | 8                                                               | 93        | 7, 099                                    | 1, 744                                                           | 25     | 5, 355                              | 2, 536           | 47 | 44                            | 9                 | 43, 704         |
| Southern.....              | 5                                                               | 76        | 3, 379                                    | 793                                                              | 23     | 2, 586                              | 998              | 39 | 1 51                          | 10                | 19, 606         |
| Total.....                 | 29                                                              | 754       | 47, 368                                   | 11, 817                                                          | 25     | 35, 551                             | 14, 397          | 40 | 1 57                          | 2                 | 173, 343        |

<sup>1</sup> Not including 2 plants not reported.<sup>2</sup> Less than one-half of 1 per cent.

TABLE 10.—TURNS POSSIBLE, TURNS WORKED, AND TOTAL PAY ROLL IN EACH DISTRICT, BY MONTHS, JULY, 1913, TO JUNE, 1915—Continued.

## PUDDLING MILLS—Concluded.

| Year, month, and district. | Number of plants and of stacks, converters, furnaces, or mills. |                  | Turns possible in period: Maximum number. | Turns customarily not worked (Saturdays, Sundays, and holidays). |               | Turns customarily worked in period. |                  |               |             | Per cent not worked owing to— |    | Total pay roll. |
|----------------------------|-----------------------------------------------------------------|------------------|-------------------------------------------|------------------------------------------------------------------|---------------|-------------------------------------|------------------|---------------|-------------|-------------------------------|----|-----------------|
|                            |                                                                 |                  |                                           |                                                                  |               | Aggregate number.                   | Actually worked. |               |             |                               |    |                 |
|                            |                                                                 |                  |                                           |                                                                  |               |                                     |                  |               | Slack work. | All other causes.             |    |                 |
| 1915.                      | <i>Plants.</i>                                                  | <i>Furnaces.</i> |                                           | <i>No.</i>                                                       | <i>P. ct.</i> |                                     | <i>No.</i>       | <i>P. ct.</i> |             |                               |    |                 |
| Jan. Eastern.....          | 9                                                               | 287              | 18,290                                    | 5,303                                                            | 29            | 12,987                              | 8,066            | 62            | 38          | (1)                           |    | \$71,276        |
| Pittsburgh.....            | 7                                                               | 298              | 19,464                                    | 4,948                                                            | 25            | 14,516                              | 8,741            | 60            | 39          |                               | 1  | 96,459          |
| G. L. and M. W. ....       | 8                                                               | 93               | 7,099                                     | 1,825                                                            | 26            | 5,274                               | 2,640            | 50            | 49          |                               | 1  | 42,836          |
| Southern.....              | 5                                                               | 76               | 3,379                                     | 790                                                              | 23            | 2,589                               | 1,050            | 41            | 59          |                               | 10 | 16,706          |
| Total.....                 | 29                                                              | 754              | 48,232                                    | 12,866                                                           | 27            | 35,366                              | 20,497           | 58            | 41          |                               | 2  | 227,307         |
| Feb. Eastern.....          | 9                                                               | 287              | 16,520                                    | 4,060                                                            | 25            | 12,460                              | 8,124            | 65            | 35          | (1)                           |    | 67,932          |
| Pittsburgh.....            | 7                                                               | 298              | 17,696                                    | 3,864                                                            | 22            | 13,832                              | 8,388            | 61            | 36          |                               | 3  | 89,716          |
| G. L. and M. W. ....       | 8                                                               | 93               | 6,412                                     | 1,460                                                            | 23            | 4,952                               | 2,796            | 56            | 43          | (1)                           |    | 47,064          |
| Southern.....              | 5                                                               | 76               | 3,052                                     | 632                                                              | 21            | 2,420                               | 1,150            | 48            | 51          |                               | 1  | 19,081          |
| Total.....                 | 29                                                              | 754              | 43,680                                    | 10,016                                                           | 23            | 33,664                              | 21,458           | 61            | 38          |                               | 1  | 223,793         |
| Mar. Eastern.....          | 9                                                               | 287              | 18,290                                    | 4,060                                                            | 22            | 14,230                              | 9,527            | 67            | 33          | (1)                           |    | 79,618          |
| Pittsburgh.....            | 7                                                               | 298              | 19,592                                    | 3,938                                                            | 20            | 15,654                              | 11,994           | 77            | 23          | (1)                           |    | 119,734         |
| G. L. and M. W. ....       | 8                                                               | 93               | 7,099                                     | 1,460                                                            | 21            | 5,639                               | 2,793            | 50            | 50          | (1)                           |    | 47,429          |
| Southern.....              | 5                                                               | 76               | 3,379                                     | 632                                                              | 19            | 2,747                               | 1,277            | 46            | 54          |                               | 6  | 17,856          |
| Total.....                 | 29                                                              | 754              | 48,360                                    | 10,090                                                           | 21            | 38,270                              | 25,591           | 67            | 32          | (1)                           |    | 264,637         |
| Apr. Eastern.....          | 9                                                               | 287              | 17,700                                    | 4,364                                                            | 25            | 13,336                              | 8,594            | 64            | 35          | (1)                           |    | 77,558          |
| Pittsburgh.....            | 7                                                               | 298              | 18,960                                    | 3,864                                                            | 20            | 15,096                              | 10,508           | 70            | 28          |                               | 2  | 107,069         |
| G. L. and M. W. ....       | 8                                                               | 93               | 6,870                                     | 1,460                                                            | 21            | 5,410                               | 2,445            | 45            | 52          |                               | 3  | 41,764          |
| Southern.....              | 5                                                               | 76               | 3,270                                     | 632                                                              | 19            | 2,638                               | 762              | 29            | 71          |                               | 19 | 17,817          |
| Total.....                 | 29                                                              | 754              | 46,800                                    | 10,320                                                           | 22            | 36,480                              | 22,309           | 61            | 36          |                               | 1  | 226,208         |
| May. Eastern.....          | 9                                                               | 287              | 18,290                                    | 5,807                                                            | 32            | 12,483                              | 8,078            | 65            | 35          | (1)                           |    | 66,431          |
| Pittsburgh.....            | 7                                                               | 298              | 19,592                                    | 5,000                                                            | 26            | 14,592                              | 8,750            | 60            | 38          |                               | 2  | 91,233          |
| G. L. and M. W. ....       | 8                                                               | 93               | 7,099                                     | 1,864                                                            | 26            | 5,235                               | 2,083            | 40            | 60          | (1)                           |    | 38,302          |
| Southern.....              | 5                                                               | 76               | 3,379                                     | 790                                                              | 23            | 2,589                               | 660              | 25            | 75          |                               | 22 | 14,747          |
| Total.....                 | 29                                                              | 754              | 48,360                                    | 13,461                                                           | 28            | 34,899                              | 19,571           | 56            | 43          |                               | 3  | 210,673         |
| June. Eastern.....         | 9                                                               | 287              | 17,700                                    | 4,377                                                            | 25            | 13,323                              | 7,229            | 54            | 46          | (1)                           |    | 64,571          |
| Pittsburgh.....            | 7                                                               | 298              | 18,960                                    | 3,864                                                            | 20            | 15,096                              | 12,520           | 83            | 14          |                               | 3  | 121,059         |
| G. L. and M. W. ....       | 8                                                               | 93               | 6,870                                     | 1,460                                                            | 21            | 5,410                               | 2,830            | 52            | 47          |                               | 1  | 48,063          |
| Southern.....              | 5                                                               | 76               | 3,270                                     | 632                                                              | 19            | 2,638                               | 1,050            | 40            | 59          |                               | 9  | 16,862          |
| Total.....                 | 29                                                              | 754              | 46,800                                    | 10,333                                                           | 22            | 36,467                              | 23,629           | 65            | 33          |                               | 2  | 250,555         |
| 1914-15:                   |                                                                 |                  |                                           |                                                                  |               |                                     |                  |               |             |                               |    |                 |
| Eastern.....               | 9                                                               | 287              | 215,350                                   | 57,596                                                           | 27            | 157,754                             | 81,054           | 51            | 38          |                               | 11 | 707,876         |
| Pittsburgh.....            | 7                                                               | 298              | 224,664                                   | 50,858                                                           | 23            | 173,806                             | 106,135          | 61            | 35          |                               | 4  | 1,038,972       |
| G. L. and M. W. ....       | 8                                                               | 93               | 83,585                                    | 19,787                                                           | 24            | 63,798                              | 31,852           | 50            | 46          |                               | 4  | 564,297         |
| Southern.....              | 5                                                               | 76               | 39,785                                    | 8,410                                                            | 21            | 31,375                              | 11,377           | 36            | 64          |                               | 15 | 205,598         |
| Total.....                 | 29                                                              | 754              | 563,384                                   | 136,651                                                          | 24            | 426,733                             | 230,418          | 54            | 39          |                               | 7  | 2,576,743       |

## BLOOMING MILLS.

| Year, month, and district. | Plants. | Mills. | No.   | P. ct. | No. | P. ct. |       |    |   | Total pay roll. |
|----------------------------|---------|--------|-------|--------|-----|--------|-------|----|---|-----------------|
| 1913.                      |         |        |       |        |     |        |       |    |   |                 |
| July. Eastern.....         | 3       | 3      | 186   | 43     | 23  | 143    | 100   |    |   | \$22,980        |
| Pittsburgh.....            | 10      | 11     | 713   | 119    | 17  | 594    | 567   | 95 | 4 | 125,978         |
| G. L. and M. W. ....       | 7       | 4      | 465   | 77     | 17  | 388    | 356   | 92 | 6 | 76,323          |
| Southern.....              | 3       | 3      | 124   | 17     | 14  | 107    | 100   | 93 | 4 | 24,550          |
| Total.....                 | 23      | 25     | 1,488 | 256    | 17  | 1,232  | 1,166 | 95 | 4 | 249,831         |

<sup>1</sup> Less than one-half of 1 per cent.<sup>2</sup> Not including 2 plants not reported.<sup>3</sup> 12 mills in our wage report, 1 not reported here.<sup>4</sup> 10 in our wage report, 2 rail blooming mills not reported here.<sup>5</sup> 28 mills in our wage report, 3 not reported here.

TABLE 10.—TURNS POSSIBLE, TURNS WORKED, AND TOTAL PAY ROLL IN EACH DISTRICT, BY MONTHS, JULY, 1913, TO JUNE, 1915—Continued.

## BLOOMING MILLS—Continued.

| Year, month, and district. |                      | Number of plants and of stacks, converters, furnaces, or mills. |        | Turns possible in period: Maximum number. | Turns customarily not worked (Saturdays, Sundays, and holidays). |        | Turns customarily worked in period. |                  |     |             | Per cent not worked owing to— |        | Total pay roll. |
|----------------------------|----------------------|-----------------------------------------------------------------|--------|-------------------------------------------|------------------------------------------------------------------|--------|-------------------------------------|------------------|-----|-------------|-------------------------------|--------|-----------------|
|                            |                      |                                                                 |        |                                           |                                                                  |        | Ag-gre-gate number.                 | Actually worked. |     | Slack work. |                               |        |                 |
|                            |                      |                                                                 |        |                                           |                                                                  |        |                                     |                  |     |             | No.                           | P. ct. |                 |
| 1913.                      |                      | Plants.                                                         | Mills. |                                           | No.                                                              | P. ct. | No.                                 | P. ct.           |     |             |                               |        |                 |
| Aug.                       | Eastern.....         | 3                                                               | 3      | 186                                       | 40                                                               | 22     | 146                                 | 132              | 90  | 10          |                               |        | \$19,380        |
|                            | Pittsburgh.....      | 10                                                              | 11     | 713                                       | 110                                                              | 15     | 603                                 | 597              | 99  | 1           |                               |        | 126,808         |
|                            | G. L. and M. W. .... | 7                                                               | 8      | 465                                       | 74                                                               | 16     | 391                                 | 377              | 96  | 3           | (1)                           |        | 78,145          |
|                            | Southern.....        | 3                                                               | 3      | 124                                       | 20                                                               | 16     | 104                                 | 104              | 100 |             |                               |        | 24,618          |
|                            | Total.....           | 23                                                              | 25     | 1,488                                     | 244                                                              | 16     | 1,244                               | 1,210            | 97  | 3           | (1)                           |        | 248,951         |
| Sept.                      | Eastern.....         | 3                                                               | 3      | 180                                       | 32                                                               | 18     | 148                                 | 144              | 97  |             |                               | 3      | 19,96           |
|                            | Pittsburgh.....      | 10                                                              | 11     | 690                                       | 94                                                               | 14     | 596                                 | 583              | 98  | 2           | (1)                           |        | 125,116         |
|                            | G. L. and M. W. .... | 7                                                               | 8      | 450                                       | 61                                                               | 14     | 389                                 | 367              | 94  | 6           |                               |        | 76,208          |
|                            | Southern.....        | 3                                                               | 3      | 120                                       | 16                                                               | 13     | 104                                 | 84               | 81  | 18          |                               | 1      | 20,577          |
|                            | Total.....           | 23                                                              | 25     | 1,440                                     | 203                                                              | 14     | 1,237                               | 1,178            | 95  | 4           | (1)                           |        | 241,870         |
| Oct.                       | Eastern.....         | 3                                                               | 3      | 186                                       | 32                                                               | 17     | 154                                 | 152              | 99  |             |                               | 1      | 21,439          |
|                            | Pittsburgh.....      | 10                                                              | 11     | 713                                       | 88                                                               | 12     | 625                                 | 581              | 93  | 7           |                               |        | 123,318         |
|                            | G. L. and M. W. .... | 7                                                               | 8      | 465                                       | 56                                                               | 12     | 409                                 | 373              | 91  | 9           |                               |        | 73,302          |
|                            | Southern.....        | 3                                                               | 3      | 124                                       | 16                                                               | 13     | 108                                 | 95               | 88  | 12          |                               |        | 19,189          |
|                            | Total.....           | 23                                                              | 25     | 1,488                                     | 192                                                              | 13     | 1,296                               | 1,201            | 93  | 7           | (1)                           |        | 237,248         |
| Nov.                       | Eastern.....         | 3                                                               | 3      | 180                                       | 40                                                               | 22     | 140                                 | 94               | 67  | 31          |                               | 2      | 14,283          |
|                            | Pittsburgh.....      | 10                                                              | 11     | 690                                       | 114                                                              | 17     | 576                                 | 512              | 89  | 11          |                               |        | 106,719         |
|                            | C. L. and M. W. .... | 7                                                               | 8      | 450                                       | 72                                                               | 16     | 378                                 | 286              | 76  | 23          |                               | 1      | 59,354          |
|                            | Southern.....        | 3                                                               | 3      | 120                                       | 22                                                               | 18     | 98                                  | 75               | 77  | 21          |                               | 2      | 14,902          |
|                            | Total.....           | 23                                                              | 25     | 1,440                                     | 248                                                              | 17     | 1,192                               | 967              | 81  | 18          |                               | 1      | 195,258         |
| Dec.                       | Eastern.....         | 3                                                               | 3      | 186                                       | 36                                                               | 19     | 150                                 | 74               | 49  | 46          |                               | 5      | 9,914           |
|                            | Pittsburgh.....      | 10                                                              | 11     | 713                                       | 123                                                              | 17     | 590                                 | 428              | 73  | 19          |                               | 9      | 88,111          |
|                            | G. L. and M. W. .... | 7                                                               | 8      | 465                                       | 79                                                               | 17     | 386                                 | 237              | 61  | 32          |                               | 6      | 52,663          |
|                            | Southern.....        | 3                                                               | 3      | 124                                       | 20                                                               | 16     | 104                                 | 68               | 65  | 20          |                               | 14     | 14,870          |
|                            | Total.....           | 23                                                              | 25     | 1,488                                     | 258                                                              | 17     | 1,230                               | 807              | 66  | 26          |                               | 8      | 165,558         |
| 1914.                      |                      |                                                                 |        |                                           |                                                                  |        |                                     |                  |     |             |                               |        |                 |
| Jan.                       | Eastern.....         | 3                                                               | 3      | 186                                       | 40                                                               | 22     | 146                                 | 59               | 40  | 60          |                               |        | 7,544           |
|                            | Pittsburgh.....      | 10                                                              | 11     | 713                                       | 102                                                              | 14     | 611                                 | 499              | 82  | 16          |                               | 3      | 102,015         |
|                            | G. L. and M. W. .... | 7                                                               | 8      | 465                                       | 60                                                               | 13     | 405                                 | 297              | 73  | 24          |                               | 3      | 60,007          |
|                            | Southern.....        | 3                                                               | 3      | 124                                       | 16                                                               | 13     | 108                                 | 79               | 73  | 27          |                               |        | 14,986          |
|                            | Total.....           | 23                                                              | 25     | 1,488                                     | 218                                                              | 15     | 1,270                               | 934              | 74  | 25          |                               | 2      | 184,552         |
| Feb.                       | Eastern.....         | 3                                                               | 3      | 168                                       | 36                                                               | 21     | 132                                 | 64               | 48  | 52          |                               |        | 10,127          |
|                            | Pittsburgh.....      | 10                                                              | 11     | 644                                       | 88                                                               | 14     | 556                                 | 541              | 97  | 2           |                               | 1      | 111,591         |
|                            | G. L. and M. W. .... | 7                                                               | 8      | 420                                       | 56                                                               | 13     | 364                                 | 297              | 82  | 18          |                               | 1      | 61,508          |
|                            | Southern.....        | 3                                                               | 3      | 112                                       | 16                                                               | 14     | 96                                  | <sup>a</sup> 103 | 107 |             |                               |        | 18,141          |
|                            | Total.....           | 23                                                              | 25     | 1,344                                     | 196                                                              | 15     | 1,148                               | 1,005            | 88  | 12          |                               | 1      | 201,367         |
| Mar.                       | Eastern.....         | 3                                                               | 3      | 186                                       | 41                                                               | 22     | 145                                 | 110              | 76  | 23          |                               | 1      | 15,543          |
|                            | Pittsburgh.....      | 10                                                              | 11     | 713                                       | 99                                                               | 14     | 614                                 | 572              | 93  | 7           |                               |        | 121,530         |
|                            | G. L. and M. W. .... | 7                                                               | 8      | 465                                       | 66                                                               | 14     | 399                                 | 333              | 83  | 16          | (1)                           |        | 67,128          |
|                            | Southern.....        | 3                                                               | 3      | 124                                       | 20                                                               | 16     | 104                                 | <sup>a</sup> 105 | 101 |             |                               |        | 21,291          |
|                            | Total.....           | 23                                                              | 25     | 1,488                                     | 226                                                              | 15     | 1,262                               | 1,120            | 89  | 11          | (1)                           |        | 225,492         |
| Apr.                       | Eastern.....         | 3                                                               | 3      | 180                                       | 36                                                               | 20     | 144                                 | 113              | 78  | 19          |                               | 3      | 16,728          |
|                            | Pittsburgh.....      | 10                                                              | 11     | 690                                       | 88                                                               | 13     | 602                                 | 480              | 80  | 17          |                               | 3      | 102,487         |
|                            | G. L. and M. W. .... | 7                                                               | 8      | 450                                       | 56                                                               | 12     | 394                                 | 317              | 80  | 19          | (1)                           |        | 64,061          |
|                            | Southern.....        | 3                                                               | 3      | 120                                       | 16                                                               | 13     | 104                                 | 89               | 86  | 14          |                               |        | 18,214          |
|                            | Total.....           | 23                                                              | 25     | 1,440                                     | 196                                                              | 14     | 1,244                               | 999              | 80  | 18          |                               | 2      | 201,490         |

<sup>1</sup> Less than one-half of 1 per cent.<sup>2</sup> Including 7 extra turns.<sup>3</sup> Including 1 extra turn.

## 42 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

TABLE 10.—TURNS POSSIBLE, TURNS WORKED, AND TOTAL PAY ROLL IN EACH DISTRICT, BY MONTHS, JULY, 1913, TO JUNE, 1915—Continued.

## BLOOMING MILLS—Continued.

| Year, month, and district. |                      | Number of plants and of stacks, converters, furnaces, or mills. |        | Turns possible in period: Maximum number. | Turns customarily not worked (Saturdays, Sundays, and holidays). |        | Turns customarily worked in period. |                  |    |                               |       |             | Total pay roll. |
|----------------------------|----------------------|-----------------------------------------------------------------|--------|-------------------------------------------|------------------------------------------------------------------|--------|-------------------------------------|------------------|----|-------------------------------|-------|-------------|-----------------|
|                            |                      |                                                                 |        |                                           |                                                                  |        | Ag-gre-gate number.                 | Actually worked. |    | Per cent not worked owing to— |       |             |                 |
|                            |                      |                                                                 |        |                                           |                                                                  |        |                                     |                  |    |                               |       | Slack work. |                 |
|                            |                      | Plants.                                                         | Mills. |                                           | No.                                                              | P. ct. | No.                                 | P. ct.           |    |                               |       |             |                 |
| 1914.                      |                      |                                                                 |        |                                           |                                                                  |        |                                     |                  |    |                               |       |             |                 |
| May.                       | Eastern.....         | 3                                                               | 3      | 186                                       | 45                                                               | 24     | 141                                 | 103              | 73 | 27                            | ..... | \$14,553    |                 |
|                            | Pittsburgh.....      | 10                                                              | 11     | 713                                       | 114                                                              | 16     | 599                                 | 375              | 63 | 32                            | 6     | 85,344      |                 |
|                            | G. L. and M. W. .... | 7                                                               | 8      | 465                                       | 70                                                               | 15     | 395                                 | 308              | 78 | 21                            | 1     | 62,725      |                 |
|                            | Southern.....        | 3                                                               | 3      | 124                                       | 20                                                               | 16     | 104                                 | 82               | 79 | 21                            | ..... | 18,401      |                 |
|                            | Total.....           | 23                                                              | 25     | 1,488                                     | 249                                                              | 17     | 1,239                               | 868              | 70 | 27                            | 3     | 181,023     |                 |
| June.                      | Eastern.....         | 3                                                               | 3      | 180                                       | 36                                                               | 20     | 144                                 | 114              | 79 | 21                            | ..... | 15,507      |                 |
|                            | Pittsburgh.....      | 10                                                              | 11     | 690                                       | 88                                                               | 13     | 602                                 | 438              | 73 | 24                            | 3     | 94,760      |                 |
|                            | G. L. and M. W. .... | 7                                                               | 8      | 450                                       | 56                                                               | 12     | 394                                 | 311              | 79 | 20                            | 1     | 62,593      |                 |
|                            | Southern.....        | 3                                                               | 3      | 120                                       | 16                                                               | 13     | 104                                 | 83               | 80 | 17                            | 3     | 18,362      |                 |
|                            | Total.....           | 23                                                              | 25     | 1,440                                     | 196                                                              | 14     | 1,244                               | 946              | 76 | 22                            | 2     | 191,222     |                 |
| 1913-14:                   |                      |                                                                 |        |                                           |                                                                  |        |                                     |                  |    |                               |       |             |                 |
|                            | Eastern.....         | 3                                                               | 3      | 2,190                                     | 457                                                              | 21     | 1,733                               | 1,302            | 75 | 24                            | 1     | 187,967     |                 |
|                            | Pittsburgh.....      | 10                                                              | 11     | 8,395                                     | 1,227                                                            | 15     | 7,168                               | 6,173            | 86 | 12                            | 2     | 1,313,777   |                 |
|                            | G. L. and M. W. .... | 7                                                               | 8      | 5,475                                     | 783                                                              | 14     | 4,692                               | 3,859            | 82 | 16                            | 1     | 794,017     |                 |
|                            | Southern.....        | 3                                                               | 3      | 1,460                                     | 215                                                              | 15     | 1,245                               | 1,067            | 86 | 13                            | 1     | 228,101     |                 |
|                            | Total.....           | 23                                                              | 25     | 17,520                                    | 2,682                                                            | 15     | 14,838                              | 12,401           | 84 | 15                            | 2     | 2,523,862   |                 |
| 1914.                      |                      |                                                                 |        |                                           |                                                                  |        |                                     |                  |    |                               |       |             |                 |
| July.                      | Eastern.....         | 3                                                               | 3      | 186                                       | 38                                                               | 20     | 148                                 | 113              | 76 | 24                            | ..... | 14,512      |                 |
|                            | Pittsburgh.....      | 10                                                              | 11     | 713                                       | 109                                                              | 15     | 604                                 | 506              | 84 | 14                            | 2     | 104,972     |                 |
|                            | G. L. and M. W. .... | 7                                                               | 8      | 465                                       | 70                                                               | 15     | 395                                 | 291              | 74 | 26                            | 1     | 60,840      |                 |
|                            | Southern.....        | 3                                                               | 3      | 124                                       | 17                                                               | 14     | 107                                 | 61               | 57 | 6                             | 37    | 15,097      |                 |
|                            | Total.....           | 23                                                              | 25     | 1,488                                     | 234                                                              | 16     | 1,254                               | 971              | 77 | 18                            | 4     | 195,421     |                 |
| Aug.                       | Eastern.....         | 3                                                               | 3      | 186                                       | 45                                                               | 24     | 141                                 | 89               | 63 | 37                            | ..... | 12,213      |                 |
|                            | Pittsburgh.....      | 10                                                              | 11     | 713                                       | 110                                                              | 15     | 603                                 | 548              | 91 | 9                             | (1)   | 112,604     |                 |
|                            | G. L. and M. W. .... | 7                                                               | 8      | 465                                       | 74                                                               | 16     | 391                                 | 288              | 74 | 26                            | (1)   | 59,241      |                 |
|                            | Southern.....        | 3                                                               | 3      | 124                                       | 20                                                               | 16     | 104                                 | 94               | 90 | 3                             | 7     | 18,243      |                 |
|                            | Total.....           | 23                                                              | 25     | 1,488                                     | 249                                                              | 17     | 1,239                               | 1,019            | 82 | 17                            | 1     | 202,301     |                 |
| Sept.                      | Eastern.....         | 3                                                               | 3      | 180                                       | 36                                                               | 20     | 144                                 | 77               | 53 | 47                            | ..... | 11,072      |                 |
|                            | Pittsburgh.....      | 10                                                              | 11     | 690                                       | 97                                                               | 14     | 593                                 | 479              | 81 | 19                            | (1)   | 98,798      |                 |
|                            | G. L. and M. W. .... | 7                                                               | 8      | 450                                       | 63                                                               | 14     | 387                                 | 277              | 72 | 28                            | ..... | 56,012      |                 |
|                            | Southern.....        | 3                                                               | 3      | 120                                       | 16                                                               | 13     | 104                                 | 76               | 73 | 20                            | 7     | 13,687      |                 |
|                            | Total.....           | 23                                                              | 25     | 1,440                                     | 212                                                              | 15     | 1,228                               | 909              | 74 | 25                            | 1     | 179,569     |                 |
| Oct.                       | Eastern.....         | 3                                                               | 3      | 186                                       | 40                                                               | 22     | 146                                 | 87               | 60 | 40                            | ..... | 11,558      |                 |
|                            | Pittsburgh.....      | 10                                                              | 11     | 713                                       | 99                                                               | 14     | 614                                 | 439              | 71 | 29                            | ..... | 86,235      |                 |
|                            | G. L. and M. W. .... | 7                                                               | 8      | 465                                       | 60                                                               | 13     | 405                                 | 268              | 66 | 34                            | ..... | 54,691      |                 |
|                            | Southern.....        | 3                                                               | 3      | 124                                       | 16                                                               | 13     | 108                                 | 62               | 57 | 36                            | 6     | 10,423      |                 |
|                            | Total.....           | 23                                                              | 25     | 1,488                                     | 215                                                              | 14     | 1,273                               | 856              | 67 | 32                            | 1     | 162,907     |                 |
| Nov.                       | Eastern.....         | 3                                                               | 3      | 180                                       | 41                                                               | 23     | 139                                 | 79               | 57 | 43                            | ..... | 10,497      |                 |
|                            | Pittsburgh.....      | 10                                                              | 11     | 690                                       | 103                                                              | 15     | 587                                 | 326              | 56 | 44                            | (1)   | 68,775      |                 |
|                            | G. L. and M. W. .... | 7                                                               | 8      | 450                                       | 68                                                               | 15     | 382                                 | 198              | 52 | 48                            | ..... | 41,541      |                 |
|                            | Southern.....        | 3                                                               | 3      | 120                                       | 20                                                               | 17     | 100                                 | 53               | 53 | 36                            | 11    | 9,442       |                 |
|                            | Total.....           | 23                                                              | 25     | 1,440                                     | 232                                                              | 16     | 1,208                               | 656              | 54 | 45                            | 1     | 130,255     |                 |
| Dec.                       | Eastern.....         | 3                                                               | 3      | 186                                       | 48                                                               | 26     | 138                                 | 64               | 46 | 54                            | ..... | 8,941       |                 |
|                            | Pittsburgh.....      | 10                                                              | 11     | 713                                       | 123                                                              | 17     | 590                                 | 381              | 65 | 35                            | ..... | 79,695      |                 |
|                            | G. L. and M. W. .... | 7                                                               | 8      | 465                                       | 76                                                               | 16     | 389                                 | 208              | 53 | 42                            | 4     | 43,695      |                 |
|                            | Southern.....        | 3                                                               | 3      | 124                                       | 19                                                               | 15     | 105                                 | 59               | 56 | 32                            | 11    | 10,752      |                 |
|                            | Total.....           | 23                                                              | 25     | 1,488                                     | 266                                                              | 18     | 1,222                               | 712              | 58 | 39                            | 2     | 143,083     |                 |

<sup>1</sup> Less than one-half of 1 per cent.

TABLE 10.—TURNS POSSIBLE, TURNS WORKED, AND TOTAL PAY ROLL IN EACH DISTRICT, BY MONTHS, JULY, 1913, TO JUNE, 1915—Continued.

## BLOOMING MILLS—Concluded.

| Year, month, and district. |                      | Number of plants and of stacks, converters, furnaces, or mills. |        | Turns possible in period: Maximum number. | Turns customarily not worked (Saturdays, Sundays, and holidays). |        | Turns customarily worked in period. |                  |        |                               |                   | Total pay roll. |
|----------------------------|----------------------|-----------------------------------------------------------------|--------|-------------------------------------------|------------------------------------------------------------------|--------|-------------------------------------|------------------|--------|-------------------------------|-------------------|-----------------|
|                            |                      |                                                                 |        |                                           |                                                                  |        | Aggregate number.                   | Actually worked. |        | Per cent not worked owing to— |                   |                 |
|                            |                      |                                                                 |        |                                           |                                                                  |        |                                     |                  |        | Slack work.                   | All other causes. |                 |
|                            |                      | Plants.                                                         | Mills. |                                           | No.                                                              | P. ct. |                                     | No.              | P. ct. |                               |                   |                 |
| 1915.                      |                      |                                                                 |        |                                           |                                                                  |        |                                     |                  |        |                               |                   |                 |
| Jan.                       | Eastern.....         | 3                                                               | 3      | 186                                       | 45                                                               | 24     | 141                                 | 56               | 40     | 60                            | .....             | \$7,101         |
|                            | Pittsburgh.....      | 10                                                              | 11     | 713                                       | 114                                                              | 16     | 599                                 | 422              | 70     | 30                            | .....             | 92,450          |
|                            | G. L. and M. W. .... | 7                                                               | 8      | 465                                       | 70                                                               | 15     | 395                                 | 267              | 68     | 32                            | (1)               | 51,777          |
|                            | Southern.....        | 3                                                               | 3      | 124                                       | 20                                                               | 16     | 104                                 | 53               | 51     | 41                            | 8                 | 11,802          |
|                            | Total.....           | 23                                                              | 25     | 1,488                                     | 249                                                              | 17     | 1,239                               | 798              | 64     | 35                            | 1                 | 163,130         |
| Feb.                       | Eastern.....         | 3                                                               | 3      | 168                                       | 36                                                               | 21     | 132                                 | 57               | 43     | 55                            | 2                 | 7,683           |
|                            | Pittsburgh.....      | 10                                                              | 11     | 644                                       | 88                                                               | 14     | 556                                 | 422              | 76     | 22                            | 2                 | 86,276          |
|                            | G. L. and M. W. .... | 7                                                               | 8      | 420                                       | 56                                                               | 13     | 364                                 | 274              | 75     | 25                            | .....             | 53,982          |
|                            | Southern.....        | 3                                                               | 3      | 112                                       | 16                                                               | 14     | 96                                  | 58               | 60     | 33                            | 6                 | 13,309          |
|                            | Total.....           | 23                                                              | 25     | 1,344                                     | 196                                                              | 15     | 1,148                               | 811              | 71     | 28                            | 2                 | 161,250         |
| Mar.                       | Eastern.....         | 3                                                               | 3      | 186                                       | 36                                                               | 19     | 150                                 | 99               | 66     | 34                            | .....             | 14,333          |
|                            | Pittsburgh.....      | 10                                                              | 11     | 713                                       | 88                                                               | 12     | 625                                 | 523              | 84     | 16                            | .....             | 106,238         |
|                            | G. L. and M. W. .... | 7                                                               | 8      | 465                                       | 56                                                               | 12     | 409                                 | 336              | 82     | 18                            | .....             | 62,274          |
|                            | Southern.....        | 3                                                               | 3      | 124                                       | 16                                                               | 13     | 108                                 | 88               | 81     | 18                            | 1                 | 16,761          |
|                            | Total.....           | 23                                                              | 25     | 1,488                                     | 196                                                              | 13     | 1,292                               | 1,046            | 81     | 19                            | (1)               | 199,606         |
| Apr.                       | Eastern.....         | 3                                                               | 3      | 180                                       | 36                                                               | 20     | 144                                 | 88               | 61     | 39                            | .....             | 13,183          |
|                            | Pittsburgh.....      | 10                                                              | 11     | 690                                       | 88                                                               | 13     | 602                                 | 523              | 87     | 13                            | (1)               | 110,608         |
|                            | G. L. and M. W. .... | 7                                                               | 8      | 450                                       | 56                                                               | 12     | 394                                 | 344              | 87     | 13                            | .....             | 63,178          |
|                            | Southern.....        | 3                                                               | 3      | 120                                       | 16                                                               | 13     | 104                                 | 90               | 87     | 13                            | .....             | 16,268          |
|                            | Total.....           | 23                                                              | 25     | 1,440                                     | 196                                                              | 14     | 1,244                               | 1,045            | 84     | 16                            | (1)               | 203,237         |
| May.                       | Eastern.....         | 3                                                               | 3      | 186                                       | 45                                                               | 24     | 141                                 | 92               | 65     | 35                            | .....             | 14,370          |
|                            | Pittsburgh.....      | 10                                                              | 11     | 713                                       | 112                                                              | 16     | 601                                 | 563              | 94     | 6                             | .....             | 122,893         |
|                            | G. L. and M. W. .... | 7                                                               | 8      | 465                                       | 70                                                               | 15     | 395                                 | 338              | 86     | 14                            | .....             | 64,536          |
|                            | Southern.....        | 3                                                               | 3      | 124                                       | 20                                                               | 16     | 104                                 | 95               | 91     | 9                             | .....             | 17,256          |
|                            | Total.....           | 23                                                              | 25     | 1,488                                     | 247                                                              | 17     | 1,241                               | 1,088            | 88     | 12                            | .....             | 219,055         |
| June.                      | Eastern.....         | 3                                                               | 3      | 180                                       | 36                                                               | 20     | 144                                 | 89               | 62     | 38                            | .....             | 14,268          |
|                            | Pittsburgh.....      | 10                                                              | 11     | 690                                       | 88                                                               | 13     | 602                                 | 584              | 97     | 3                             | .....             | 125,538         |
|                            | G. L. and M. W. .... | 7                                                               | 8      | 450                                       | 56                                                               | 12     | 394                                 | 322              | 82     | 18                            | 1                 | 62,301          |
|                            | Southern.....        | 3                                                               | 3      | 120                                       | 16                                                               | 13     | 104                                 | 100              | 96     | 3                             | 1                 | 17,585          |
|                            | Total.....           | 23                                                              | 25     | 1,440                                     | 196                                                              | 14     | 1,244                               | 1,095            | 88     | 12                            | (1)               | 219,692         |
| 1914-15:                   |                      |                                                                 |        |                                           |                                                                  |        |                                     |                  |        |                               |                   |                 |
|                            | Eastern.....         | 3                                                               | 3      | 2,190                                     | 482                                                              | 22     | 1,708                               | 990              | 58     | 42                            | (1)               | 139,731         |
|                            | Pittsburgh.....      | 10                                                              | 11     | 8,395                                     | 1,219                                                            | 15     | 7,176                               | 5,716            | 80     | 20                            | (1)               | 1,195,082       |
|                            | G. L. and M. W. .... | 7                                                               | 8      | 5,475                                     | 775                                                              | 14     | 4,700                               | 3,411            | 73     | 27                            | (1)               | 674,068         |
|                            | Southern.....        | 3                                                               | 3      | 1,460                                     | 212                                                              | 15     | 1,248                               | 889              | 71     | 21                            | 8                 | 170,625         |
|                            | Total.....           | 23                                                              | 25     | 17,520                                    | 2,688                                                            | 15     | 14,832                              | 11,006           | 74     | 25                            | 1                 | 2,179,506       |

## PLATE MILLS.

|                      |    |    |       |     |    |       |     |    |    |   |  |          |
|----------------------|----|----|-------|-----|----|-------|-----|----|----|---|--|----------|
| 1913.                |    |    |       |     |    |       |     |    |    |   |  |          |
| July. Eastern.....   | 3  | 8  | 496   | 113 | 23 | 383   | 273 | 71 | 29 |   |  | \$51,797 |
| Pittsburgh.....      | 6  | 9  | 558   | 100 | 18 | 458   | 395 | 86 | 11 | 3 |  | 107,619  |
| G. L. and M. W. .... | 4  | 4  | 217   | 41  | 19 | 176   | 141 | 80 | 20 |   |  | 53,205   |
| Total.....           | 13 | 21 | 1,271 | 254 | 20 | 1,017 | 809 | 80 | 19 | 1 |  | 212,621  |
| Aug. Eastern.....    | 3  | 8  | 496   | 120 | 24 | 376   | 256 | 68 | 32 |   |  | 50,715   |
| Pittsburgh.....      | 6  | 9  | 558   | 100 | 18 | 458   | 393 | 86 | 14 |   |  | 116,341  |
| G. L. and M. W. .... | 4  | 4  | 217   | 40  | 18 | 177   | 135 | 76 | 24 |   |  | 54,979   |
| Total.....           | 13 | 21 | 1,271 | 260 | 20 | 1,011 | 784 | 78 | 22 |   |  | 222,035  |

<sup>1</sup> Less than one-half of 1 per cent.

TABLE 10.—TURNS POSSIBLE, TURNS WORKED, AND TOTAL PAY ROLL IN EACH DISTRICT, BY MONTHS, JULY, 1913, TO JUNE, 1915—Continued.

## PLATE MILLS—Continued.

| Year, month, and district. | Number of plants and of stacks, converters, furnaces, or mills. |        | Turns possible in period: Maximum number. | Turns customarily not worked (Saturdays, Sundays, and holidays). |        | Turns customarily worked in period. |                  |        |                               |                   |           | Total pay roll. |
|----------------------------|-----------------------------------------------------------------|--------|-------------------------------------------|------------------------------------------------------------------|--------|-------------------------------------|------------------|--------|-------------------------------|-------------------|-----------|-----------------|
|                            |                                                                 |        |                                           |                                                                  |        | Ag-gre-gate number.                 | Actually worked. |        | Per cent not worked owing to— |                   |           |                 |
|                            |                                                                 |        |                                           |                                                                  |        |                                     |                  |        | Slack work.                   | All other causes. |           |                 |
| 1913.                      | Plants.                                                         | Mills. |                                           | No.                                                              | P. ct. |                                     | No.              | P. ct. |                               |                   |           |                 |
| Sept. Eastern.....         | 3                                                               | 8      | 480                                       | 96                                                               | 20     | 384                                 | 246              | 64     | 36                            |                   | \$51,709  |                 |
| Pittsburgh.....            | 6                                                               | 9      | 540                                       | 80                                                               | 15     | 460                                 | 388              | 84     | 16                            |                   | 112,813   |                 |
| G. L. and M. W.....        | 4                                                               | 4      | 210                                       | 36                                                               | 17     | 174                                 | 115              | 66     | 34                            |                   | 48,275    |                 |
| Total.....                 | 13                                                              | 21     | 1,230                                     | 212                                                              | 17     | 1,018                               | 749              | 74     | 26                            |                   | 212,797   |                 |
| Oct. Eastern.....          | 3                                                               | 8      | 496                                       | 96                                                               | 19     | 400                                 | 274              | 69     | 32                            |                   | 54,029    |                 |
| Pittsburgh.....            | 6                                                               | 9      | 558                                       | 80                                                               | 14     | 478                                 | 382              | 80     | 20                            | (1)               | 116,209   |                 |
| G. L. and M. W.....        | 4                                                               | 4      | 217                                       | 32                                                               | 15     | 185                                 | 138              | 75     | 25                            |                   | 51,862    |                 |
| Total.....                 | 13                                                              | 21     | 1,271                                     | 208                                                              | 16     | 1,063                               | 794              | 75     | 25                            | (1)               | 225,100   |                 |
| Nov. Eastern.....          | 3                                                               | 8      | 480                                       | 120                                                              | 25     | 360                                 | 201              | 56     | 44                            |                   | 43,640    |                 |
| Pittsburgh.....            | 6                                                               | 9      | 540                                       | 104                                                              | 19     | 436                                 | 333              | 76     | 24                            |                   | 102,009   |                 |
| G. L. and M. W.....        | 4                                                               | 4      | 210                                       | 40                                                               | 19     | 170                                 | 88               | 52     | 48                            |                   | 39,849    |                 |
| Total.....                 | 13                                                              | 21     | 1,230                                     | 264                                                              | 21     | 966                                 | 622              | 64     | 36                            |                   | 185,498   |                 |
| Dec. Eastern.....          | 3                                                               | 8      | 496                                       | 113                                                              | 23     | 383                                 | 207              | 54     | 46                            |                   | 42,954    |                 |
| Pittsburgh.....            | 6                                                               | 9      | 558                                       | 103                                                              | 18     | 455                                 | 305              | 67     | 29                            | 4                 | 93,916    |                 |
| G. L. and M. W.....        | 4                                                               | 4      | 217                                       | 43                                                               | 20     | 174                                 | 105              | 60     | 35                            | 5                 | 40,248    |                 |
| Total.....                 | 13                                                              | 21     | 1,271                                     | 259                                                              | 20     | 1,012                               | 607              | 61     | 37                            | 2                 | 177,118   |                 |
| 1914.                      |                                                                 |        |                                           |                                                                  |        |                                     |                  |        |                               |                   |           |                 |
| Jan. Eastern.....          | 3                                                               | 8      | 496                                       | 104                                                              | 21     | 392                                 | 219              | 56     | 37                            | 7                 | 44,460    |                 |
| Pittsburgh.....            | 6                                                               | 9      | 558                                       | 89                                                               | 16     | 469                                 | 255              | 54     | 48                            |                   | 86,574    |                 |
| G. L. and M. W.....        | 4                                                               | 4      | 217                                       | 33                                                               | 15     | 184                                 | 95               | 52     | 48                            |                   | 35,529    |                 |
| Total.....                 | 13                                                              | 21     | 1,271                                     | 226                                                              | 18     | 1,045                               | 569              | 54     | 43                            | 3                 | 166,563   |                 |
| Feb. Eastern.....          | 3                                                               | 8      | 448                                       | 96                                                               | 21     | 352                                 | 252              | 72     | 28                            |                   | 46,446    |                 |
| Pittsburgh.....            | 6                                                               | 9      | 504                                       | 80                                                               | 16     | 424                                 | 310              | 73     | 26                            | (1)               | 93,468    |                 |
| G. L. and M. W.....        | 4                                                               | 4      | 196                                       | 32                                                               | 16     | 164                                 | 122              | 74     | 26                            |                   | 40,793    |                 |
| Total.....                 | 13                                                              | 21     | 1,148                                     | 208                                                              | 18     | 940                                 | 684              | 73     | 27                            | (1)               | 180,707   |                 |
| Mar. Eastern.....          | 3                                                               | 8      | 496                                       | 112                                                              | 23     | 384                                 | 251              | 65     | 35                            |                   | 46,646    |                 |
| Pittsburgh.....            | 6                                                               | 9      | 558                                       | 92                                                               | 16     | 466                                 | 288              | 62     | 38                            |                   | 87,954    |                 |
| G. L. and M. W.....        | 4                                                               | 4      | 217                                       | 39                                                               | 18     | 178                                 | 109              | 61     | 39                            |                   | 38,617    |                 |
| Total.....                 | 13                                                              | 21     | 1,271                                     | 243                                                              | 19     | 1,028                               | 648              | 63     | 37                            |                   | 173,217   |                 |
| Apr. Eastern.....          | 3                                                               | 8      | 480                                       | 96                                                               | 20     | 384                                 | 238              | 62     | 38                            |                   | 45,384    |                 |
| Pittsburgh.....            | 6                                                               | 9      | 540                                       | 80                                                               | 15     | 460                                 | 337              | 73     | 27                            |                   | 98,030    |                 |
| G. L. and M. W.....        | 4                                                               | 4      | 210                                       | 32                                                               | 15     | 178                                 | 118              | 66     | 34                            |                   | 37,337    |                 |
| Total.....                 | 13                                                              | 21     | 1,230                                     | 208                                                              | 17     | 1,022                               | 693              | 68     | 32                            |                   | 180,751   |                 |
| May. Eastern.....          | 3                                                               | 8      | 496                                       | 120                                                              | 24     | 376                                 | 218              | 58     | 42                            |                   | 43,982    |                 |
| Pittsburgh.....            | 6                                                               | 9      | 558                                       | 100                                                              | 18     | 458                                 | 262              | 57     | 40                            | 3                 | 79,250    |                 |
| G. L. and M. W.....        | 4                                                               | 4      | 217                                       | 40                                                               | 18     | 177                                 | 111              | 63     | 37                            |                   | 34,741    |                 |
| Total.....                 | 13                                                              | 21     | 1,271                                     | 260                                                              | 20     | 1,011                               | 591              | 58     | 40                            | 1                 | 157,973   |                 |
| June. Eastern.....         | 3                                                               | 8      | 480                                       | 96                                                               | 20     | 384                                 | 248              | 65     | 35                            |                   | 45,215    |                 |
| Pittsburgh.....            | 6                                                               | 9      | 540                                       | 80                                                               | 15     | 460                                 | 298              | 65     | 35                            |                   | 89,922    |                 |
| G. L. and M. W.....        | 4                                                               | 4      | 210                                       | 32                                                               | 15     | 178                                 | 113              | 63     | 37                            |                   | 33,728    |                 |
| Total.....                 | 13                                                              | 21     | 1,230                                     | 208                                                              | 17     | 1,022                               | 659              | 64     | 36                            |                   | 168,865   |                 |
| 1913-14:                   |                                                                 |        |                                           |                                                                  |        |                                     |                  |        |                               |                   |           |                 |
| Eastern.....               | 3                                                               | 8      | 5,840                                     | 1,282                                                            | 22     | 4,558                               | 2,883            | 63     | 36                            | 1                 | 566,977   |                 |
| Pittsburgh.....            | 6                                                               | 9      | 6,570                                     | 1,088                                                            | 17     | 5,482                               | 3,946            | 72     | 27                            | 1                 | 1,184,105 |                 |
| G. L. and M. W.....        | 4                                                               | 4      | 2,555                                     | 440                                                              | 17     | 2,115                               | 1,390            | 66     | 34                            | (1)               | 512,163   |                 |
| Total.....                 | 13                                                              | 21     | 14,965                                    | 2,810                                                            | 19     | 12,155                              | 8,219            | 68     | 33                            | 1                 | 2,263,245 |                 |

1 Less than one-half of 1 per cent.



TABLE 10.—TURNS POSSIBLE, TURNS WORKED, AND TOTAL PAY ROLL IN EACH DISTRICT, BY MONTHS, JULY, 1913, TO JUNE, 1915—Continued.

## PLATE MILLS—Continued.

| Year, month, and district. | Number of plants and of stacks, converters, furnaces, or mills. |        | Turns possible in period: Maximum number. | Turns customarily not worked (Saturdays, Sundays, and holidays). |        | Turns customarily worked in period. |                  |        |                               |                   | Total pay roll. |
|----------------------------|-----------------------------------------------------------------|--------|-------------------------------------------|------------------------------------------------------------------|--------|-------------------------------------|------------------|--------|-------------------------------|-------------------|-----------------|
|                            |                                                                 |        |                                           |                                                                  |        | Aggregate number.                   | Actually worked. |        | Per cent not worked owing to— |                   |                 |
|                            |                                                                 |        |                                           |                                                                  |        |                                     |                  |        | Slack work.                   | All other causes. |                 |
| 1914.                      | Plants.                                                         | Mills. |                                           | No.                                                              | P. ct. |                                     | No.              | P. ct. |                               |                   |                 |
| July. Eastern.....         | 3                                                               | 7      | 434                                       | 91                                                               | 21     | 343                                 | 228              | 66     | 34                            |                   | \$48,205        |
| Pittsburgh.....            | 6                                                               | 9      | 558                                       | 91                                                               | 16     | 467                                 | 285              | 61     | 38                            | 1                 | 87,462          |
| G. L. and M. W.....        | 4                                                               | 4      | 217                                       | 38                                                               | 18     | 179                                 | 115              | 64     | 36                            |                   | 32,511          |
| Total.....                 | 13                                                              | 20     | 1,209                                     | 220                                                              | 18     | 989                                 | 625              | 63     | 36                            | (1)               | 168,178         |
| Aug. Eastern.....          | 3                                                               | 7      | 434                                       | 105                                                              | 24     | 329                                 | 231              | 70     | 30                            |                   | 48,209          |
| Pittsburgh.....            | 6                                                               | 9      | 558                                       | 100                                                              | 18     | 458                                 | 234              | 51     | 49                            |                   | 82,273          |
| G. L. and M. W.....        | 4                                                               | 4      | 217                                       | 40                                                               | 18     | 177                                 | 99               | 56     | 44                            |                   | 29,253          |
| Total.....                 | 13                                                              | 20     | 1,209                                     | 245                                                              | 20     | 964                                 | 564              | 59     | 41                            |                   | 159,735         |
| Sept. Eastern.....         | 3                                                               | 7      | 420                                       | 92                                                               | 22     | 328                                 | 210              | 64     | 36                            |                   | 39,351          |
| Pittsburgh.....            | 6                                                               | 9      | 540                                       | 84                                                               | 16     | 456                                 | 246              | 54     | 46                            |                   | 77,746          |
| G. L. and M. W.....        | 4                                                               | 4      | 210                                       | 36                                                               | 17     | 174                                 | 98               | 56     | 44                            |                   | 30,248          |
| Total.....                 | 13                                                              | 20     | 1,170                                     | 212                                                              | 18     | 958                                 | 554              | 58     | 42                            |                   | 147,345         |
| Oct. Eastern.....          | 3                                                               | 7      | 434                                       | 91                                                               | 21     | 343                                 | 125              | 36     | 64                            |                   | 24,005          |
| Pittsburgh.....            | 6                                                               | 9      | 558                                       | 88                                                               | 16     | 470                                 | 184              | 39     | 60                            | (1)               | 61,470          |
| G. L. and M. W.....        | 4                                                               | 4      | 217                                       | 33                                                               | 15     | 184                                 | 82               | 45     | 55                            |                   | 27,611          |
| Total.....                 | 13                                                              | 20     | 1,209                                     | 212                                                              | 18     | 997                                 | 391              | 39     | 61                            | (1)               | 113,086         |
| Nov. Eastern.....          | 3                                                               | 7      | 420                                       | 98                                                               | 23     | 322                                 | 127              | 39     | 61                            |                   | 25,124          |
| Pittsburgh.....            | 6                                                               | 9      | 540                                       | 96                                                               | 18     | 444                                 | 156              | 35     | 65                            |                   | 49,586          |
| G. L. and M. W.....        | 4                                                               | 4      | 210                                       | 39                                                               | 19     | 171                                 | 75               | 44     | 56                            |                   | 26,103          |
| Total.....                 | 13                                                              | 20     | 1,170                                     | 233                                                              | 20     | 937                                 | 358              | 38     | 62                            |                   | 100,813         |
| Dec. Eastern.....          | 3                                                               | 7      | 434                                       | 98                                                               | 23     | 336                                 | 78               | 23     | 47                            | 30                | 14,412          |
| Pittsburgh.....            | 6                                                               | 9      | 558                                       | 109                                                              | 20     | 449                                 | 192              | 43     | 56                            | 1                 | 56,605          |
| G. L. and M. W.....        | 4                                                               | 4      | 217                                       | 44                                                               | 20     | 173                                 | 63               | 36     | 64                            |                   | 21,886          |
| Total.....                 | 13                                                              | 20     | 1,209                                     | 251                                                              | 21     | 958                                 | 333              | 35     | 54                            | 11                | 92,903          |
| 1915.                      |                                                                 |        |                                           |                                                                  |        |                                     |                  |        |                               |                   |                 |
| Jan. Eastern.....          | 3                                                               | 7      | 434                                       | 105                                                              | 24     | 329                                 | 148              | 45     | 30                            | 25                | 22,907          |
| Pittsburgh.....            | 6                                                               | 9      | 558                                       | 100                                                              | 18     | 458                                 | 191              | 42     | 57                            | 1                 | 58,530          |
| G. L. and M. W.....        | 4                                                               | 4      | 217                                       | 40                                                               | 18     | 177                                 | 83               | 47     | 53                            |                   | 26,108          |
| Total.....                 | 13                                                              | 20     | 1,209                                     | 245                                                              | 20     | 964                                 | 422              | 44     | 47                            | 9                 | 107,545         |
| Feb. Eastern.....          | 3                                                               | 7      | 392                                       | 84                                                               | 21     | 308                                 | 183              | 59     | 41                            |                   | 32,269          |
| Pittsburgh.....            | 6                                                               | 9      | 504                                       | 80                                                               | 16     | 424                                 | 306              | 72     | 24                            | 4                 | 92,095          |
| G. L. and M. W.....        | 4                                                               | 4      | 196                                       | 32                                                               | 16     | 164                                 | 102              | 62     | 38                            |                   | 30,487          |
| Total.....                 | 13                                                              | 20     | 1,092                                     | 196                                                              | 18     | 896                                 | 591              | 66     | 32                            | 2                 | 154,851         |
| Mar. Eastern.....          | 3                                                               | 7      | 434                                       | 84                                                               | 19     | 350                                 | 200              | 57     | 43                            |                   | 38,383          |
| Pittsburgh.....            | 6                                                               | 9      | 558                                       | 80                                                               | 14     | 478                                 | 338              | 71     | 29                            |                   | 107,815         |
| G. L. and M. W.....        | 4                                                               | 4      | 217                                       | 32                                                               | 15     | 185                                 | 114              | 62     | 38                            |                   | 33,521          |
| Total.....                 | 13                                                              | 20     | 1,209                                     | 196                                                              | 16     | 1,013                               | 652              | 64     | 36                            |                   | 179,719         |
| Apr. Eastern.....          | 3                                                               | 7      | 420                                       | 84                                                               | 20     | 336                                 | 238              | 71     | 29                            |                   | 42,289          |
| Pittsburgh.....            | 6                                                               | 9      | 540                                       | 80                                                               | 15     | 460                                 | 245              | 53     | 47                            | (1)               | 76,826          |
| G. L. and M. W.....        | 4                                                               | 4      | 210                                       | 32                                                               | 15     | 178                                 | 112              | 63     | 37                            |                   | 33,727          |
| Total.....                 | 13                                                              | 20     | 1,170                                     | 196                                                              | 17     | 971                                 | 595              | 61     | 39                            | (1)               | 152,842         |
| May. Eastern.....          | 3                                                               | 7      | 434                                       | 107                                                              | 25     | 327                                 | 229              | 70     | 30                            |                   | 44,558          |
| Pittsburgh.....            | 6                                                               | 9      | 558                                       | 100                                                              | 18     | 458                                 | 309              | 67     | 32                            | (1)               | 95,042          |
| G. L. and M. W.....        | 4                                                               | 4      | 217                                       | 40                                                               | 18     | 177                                 | 117              | 66     | 34                            |                   | 34,768          |
| Total.....                 | 13                                                              | 20     | 1,209                                     | 247                                                              | 20     | 962                                 | 655              | 68     | 32                            | (1)               | 174,368         |

<sup>1</sup> Less than one-half of 1 per cent.

# 46 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

TABLE 10.—TURNS POSSIBLE, TURNS WORKED, AND TOTAL PAY ROLL IN EACH DISTRICT, BY MONTHS, JULY, 1913, TO JUNE, 1915—Continued.

## PLATE MILLS—Concluded.

| Year, month, and district. | Number of plants and of stacks, converters, furnaces, or mills. |               | Turns possible in period: Maximum number. | Turns customarily not worked (Saturdays, Sundays, and holidays). |               | Turns customarily worked in period. |                  |               |                               | Total pay roll. |                   |
|----------------------------|-----------------------------------------------------------------|---------------|-------------------------------------------|------------------------------------------------------------------|---------------|-------------------------------------|------------------|---------------|-------------------------------|-----------------|-------------------|
|                            |                                                                 |               |                                           |                                                                  |               | Aggregate number.                   | Actually worked. |               | Per cent not worked owing to— |                 |                   |
|                            |                                                                 |               |                                           |                                                                  |               |                                     |                  |               | Slack work.                   |                 | All other causes. |
| 1915.                      | <i>Plants.</i>                                                  | <i>Mills.</i> |                                           | <i>No.</i>                                                       | <i>P. ct.</i> |                                     | <i>No.</i>       | <i>P. ct.</i> |                               |                 |                   |
| June. Eastern.....         | 3                                                               | 7             | 420                                       | 84                                                               | 20            | 336                                 | 269              | 80            | 20                            |                 |                   |
| Pittsburgh.....            | 6                                                               | 9             | 540                                       | 80                                                               | 15            | 400                                 | 379              | 82            | 17                            | 1               |                   |
| G. L. and M. W. ....       | 4                                                               | 4             | 210                                       | 32                                                               | 15            | 178                                 | 134              | 75            | 25                            |                 |                   |
| Total.....                 | 13                                                              | 20            | 1,170                                     | 196                                                              | 17            | 974                                 | 782              | 80            | 19                            | 1               |                   |
| 1914-15:                   |                                                                 |               |                                           |                                                                  |               |                                     |                  |               |                               |                 |                   |
| Eastern.....               | 3                                                               | 7             | 5,110                                     | 1,123                                                            | 22            | 3,987                               | 2,266            | 57            | 39                            | 4               |                   |
| Pittsburgh.....            | 6                                                               | 9             | 6,570                                     | 1,088                                                            | 17            | 5,482                               | 3,065            | 56            | 43                            | 1               |                   |
| G. L. and M. W. ....       | 4                                                               | 4             | 2,555                                     | 438                                                              | 17            | 2,117                               | 1,194            | 56            | 44                            |                 |                   |
| Total.....                 | 13                                                              | 20            | 14,235                                    | 2,649                                                            | 19            | 11,586                              | 6,525            | 56            | 42                            | 2               |                   |

## STANDARD RAIL MILLS.

|                      |   |   |     |    |    |     |                  |     |    |   |  |          |
|----------------------|---|---|-----|----|----|-----|------------------|-----|----|---|--|----------|
| 1913.                |   |   |     |    |    |     |                  |     |    |   |  |          |
| July. Eastern.....   | 2 | 2 | 124 | 25 | 20 | 99  | 99               | 100 |    |   |  | \$45,816 |
| Pittsburgh.....      | 2 | 2 | 124 | 18 | 15 | 106 | 102              | 96  | 1  | 3 |  | 55,459   |
| G. L. and M. W. .... | 3 | 3 | 186 | 32 | 17 | 154 | 135              | 88  | 7  | 5 |  | 103,906  |
| Total.....           | 7 | 7 | 434 | 75 | 17 | 359 | 336              | 94  | 3  | 3 |  | 205,181  |
| Aug. Eastern.....    | 2 | 2 | 124 | 25 | 20 | 99  | <sup>1</sup> 103 | 104 |    |   |  | 45,951   |
| Pittsburgh.....      | 2 | 2 | 124 | 20 | 16 | 104 | 104              | 100 |    |   |  | 57,564   |
| G. L. and M. W. .... | 3 | 3 | 186 | 30 | 16 | 156 | 148              | 95  | 5  |   |  | 112,256  |
| Total.....           | 7 | 7 | 434 | 75 | 17 | 359 | 355              | 99  | 1  |   |  | 215,771  |
| Sept. Eastern.....   | 2 | 2 | 120 | 21 | 18 | 99  | 99               | 100 |    |   |  | 44,301   |
| Pittsburgh.....      | 2 | 2 | 120 | 16 | 13 | 104 | 104              | 100 |    |   |  | 57,051   |
| G. L. and M. W. .... | 3 | 3 | 180 | 28 | 16 | 152 | 143              | 94  | 6  |   |  | 99,392   |
| Total.....           | 7 | 7 | 420 | 65 | 15 | 355 | 346              | 97  | 3  |   |  | 200,744  |
| Oct. Eastern.....    | 2 | 2 | 124 | 20 | 16 | 104 | <sup>2</sup> 106 | 102 |    |   |  | 44,098   |
| Pittsburgh.....      | 2 | 2 | 124 | 16 | 13 | 108 | <sup>2</sup> 109 | 101 |    |   |  | 59,250   |
| G. L. and M. W. .... | 3 | 3 | 186 | 24 | 13 | 162 | 124              | 77  | 23 |   |  | 81,690   |
| Total.....           | 7 | 7 | 434 | 60 | 14 | 374 | 339              | 91  | 9  |   |  | 185,038  |
| Nov. Eastern.....    | 2 | 2 | 120 | 26 | 22 | 94  | 71               | 76  | 24 |   |  | 27,392   |
| Pittsburgh.....      | 2 | 2 | 120 | 20 | 17 | 100 | 100              | 100 |    |   |  | 52,621   |
| G. L. and M. W. .... | 3 | 3 | 180 | 30 | 17 | 150 | 87               | 58  | 42 |   |  | 56,302   |
| Total.....           | 7 | 7 | 420 | 76 | 18 | 344 | 258              | 75  | 25 |   |  | 136,315  |
| Dec. Eastern.....    | 2 | 2 | 124 | 24 | 19 | 100 | 47               | 47  | 53 |   |  | 18,525   |
| Pittsburgh.....      | 2 | 2 | 124 | 19 | 15 | 105 | 76               | 72  | 28 |   |  | 43,841   |
| G. L. and M. W. .... | 3 | 3 | 186 | 34 | 18 | 152 | 84               | 55  | 45 |   |  | 54,929   |
| Total.....           | 7 | 7 | 434 | 77 | 18 | 357 | 207              | 58  | 42 |   |  | 117,295  |
| 1914.                |   |   |     |    |    |     |                  |     |    |   |  |          |
| Jan. Eastern.....    | 2 | 2 | 124 | 21 | 17 | 103 | 34               | 33  | 67 |   |  | 14,692   |
| Pittsburgh.....      | 2 | 2 | 124 | 18 | 15 | 106 | 51               | 48  | 52 |   |  | 26,667   |
| G. L. and M. W. .... | 3 | 3 | 186 | 24 | 13 | 162 | 86               | 53  | 47 |   |  | 57,179   |
| Total.....           | 7 | 7 | 434 | 63 | 15 | 371 | 171              | 46  | 54 |   |  | 98,538   |
| Feb. Eastern.....    | 2 | 2 | 112 | 20 | 18 | 92  | 28               | 30  | 70 |   |  | 12,226   |
| Pittsburgh.....      | 2 | 2 | 112 | 16 | 14 | 96  | 83               | 86  | 14 |   |  | 40,106   |
| G. L. and M. W. .... | 3 | 3 | 168 | 24 | 14 | 144 | 112              | 78  | 22 |   |  | 61,851   |
| Total.....           | 7 | 7 | 392 | 60 | 15 | 332 | 223              | 67  | 33 |   |  | 114,183  |

<sup>1</sup> Including 4 extra turns.

<sup>2</sup> Including 2 extra turns.

<sup>3</sup> Including 1 extra turn.

TABLE 10.—TURNS POSSIBLE, TURNS WORKED, AND TOTAL PAY ROLL IN EACH DISTRICT, BY MONTHS, JULY, 1913, TO JUNE, 1915—Continued.

## STANDARD RAIL MILLS—Continued.

| Year, month, and district. |                   | Number of plants and of stacks, converters, furnaces, or mills. |        | Turns possible in period: Maximum number. | Turns customarily not worked (Saturdays, Sundays, and holidays). |        | Turns customarily worked in period. |                  |        |             | Per cent not worked owing to— |       | Total pay roll. |
|----------------------------|-------------------|-----------------------------------------------------------------|--------|-------------------------------------------|------------------------------------------------------------------|--------|-------------------------------------|------------------|--------|-------------|-------------------------------|-------|-----------------|
|                            |                   |                                                                 |        |                                           |                                                                  |        | Aggregate number.                   | Actually worked. |        |             |                               |       |                 |
|                            |                   |                                                                 |        |                                           |                                                                  |        |                                     |                  |        | Slack work. | All other causes.             |       |                 |
|                            |                   | Plants.                                                         | Mills. |                                           | No.                                                              | P. ct. |                                     | No.              | P. ct. |             |                               |       |                 |
| 1914.                      |                   |                                                                 |        |                                           |                                                                  |        |                                     |                  |        |             |                               |       |                 |
| Mar.                       | Eastern.....      | 2                                                               | 2      | 124                                       | 24                                                               | 19     |                                     | 100              | 77     | 77          | 23                            | ..... | \$29,429        |
|                            | Pittsburgh.....   | 2                                                               | 2      | 124                                       | 18                                                               | 15     |                                     | 106              | 70     | 66          | 34                            | ..... | 39,827          |
|                            | G. L. and M. W. . | 3                                                               | 3      | 186                                       | 30                                                               | 16     |                                     | 156              | 103    | 66          | 31                            | 3     | 61,443          |
|                            | Total.....        | 7                                                               | 7      | 434                                       | 72                                                               | 17     |                                     | 362              | 250    | 69          | 30                            | 1     | 130,699         |
| Apr.                       | Eastern.....      | 2                                                               | 2      | 120                                       | 20                                                               | 17     |                                     | 100              | 85     | 85          | 15                            | ..... | 34,601          |
|                            | Pittsburgh.....   | 2                                                               | 2      | 120                                       | 16                                                               | 13     |                                     | 104              | 80     | 77          | 23                            | ..... | 42,504          |
|                            | G. L. and M. W. . | 3                                                               | 3      | 180                                       | 24                                                               | 13     |                                     | 156              | 112    | 72          | 25                            | 3     | 62,507          |
|                            | Total.....        | 7                                                               | 7      | 420                                       | 60                                                               | 14     |                                     | 360              | 277    | 77          | 22                            | 1     | 139,612         |
| May.                       | Eastern.....      | 2                                                               | 2      | 124                                       | 25                                                               | 20     |                                     | 99               | 86     | 87          | 13                            | ..... | 33,540          |
|                            | Pittsburgh.....   | 2                                                               | 2      | 124                                       | 20                                                               | 16     |                                     | 104              | 103    | 99          | 1                             | ..... | 50,461          |
|                            | G. L. and M. W. . | 3                                                               | 3      | 186                                       | 30                                                               | 16     |                                     | 156              | 104    | 67          | 33                            | ..... | 59,166          |
|                            | Total.....        | 7                                                               | 7      | 434                                       | 75                                                               | 17     |                                     | 359              | 293    | 82          | 18                            | ..... | 143,167         |
| June.                      | Eastern.....      | 2                                                               | 2      | 120                                       | 20                                                               | 17     |                                     | 100              | 82     | 82          | 18                            | ..... | 33,204          |
|                            | Pittsburgh.....   | 2                                                               | 2      | 120                                       | 16                                                               | 13     |                                     | 104              | 75     | 72          | 28                            | ..... | 40,250          |
|                            | G. L. and M. W. . | 3                                                               | 3      | 180                                       | 24                                                               | 13     |                                     | 156              | 101    | 65          | 35                            | 1     | 59,589          |
|                            | Total.....        | 7                                                               | 7      | 420                                       | 60                                                               | 14     |                                     | 360              | 258    | 72          | 28                            | (1)   | 133,043         |
| 1913-14:                   |                   |                                                                 |        |                                           |                                                                  |        |                                     |                  |        |             |                               |       |                 |
|                            | Eastern.....      | 2                                                               | 2      | 1,460                                     | 271                                                              | 19     |                                     | 1,189            | 917    | 77          | 23                            | ..... | 383,775         |
|                            | Pittsburgh.....   | 2                                                               | 2      | 1,460                                     | 213                                                              | 15     |                                     | 1,247            | 1,057  | 85          | 15                            | (1)   | 565,601         |
|                            | G. L. and M. W. . | 3                                                               | 3      | 2,190                                     | 334                                                              | 15     |                                     | 1,856            | 1,339  | 72          | 27                            | 1     | 870,210         |
|                            | Total.....        | 7                                                               | 7      | 5,110                                     | 818                                                              | 16     |                                     | 4,292            | 3,313  | 77          | 22                            | 1     | 1,819,586       |
| 1914.                      |                   |                                                                 |        |                                           |                                                                  |        |                                     |                  |        |             |                               |       |                 |
| July.                      | Eastern.....      | 2                                                               | 2      | 124                                       | 22                                                               | 18     |                                     | 102              | 82     | 80          | 20                            | ..... | 31,871          |
|                            | Pittsburgh.....   | 2                                                               | 2      | 124                                       | 19                                                               | 15     |                                     | 105              | 99     | 94          | 6                             | ..... | 47,624          |
|                            | G. L. and M. W. . | 3                                                               | 3      | 186                                       | 30                                                               | 16     |                                     | 156              | 111    | 71          | 29                            | ..... | 60,166          |
|                            | Total.....        | 7                                                               | 7      | 434                                       | 71                                                               | 16     |                                     | 363              | 292    | 80          | 20                            | ..... | 139,661         |
| Aug.                       | Eastern.....      | 2                                                               | 2      | 124                                       | 25                                                               | 20     |                                     | 99               | 22     | 22          | 78                            | ..... | 9,441           |
|                            | Pittsburgh.....   | 2                                                               | 2      | 124                                       | 20                                                               | 16     |                                     | 104              | 98     | 94          | 6                             | ..... | 50,109          |
|                            | G. L. and M. W. . | 3                                                               | 3      | 186                                       | 30                                                               | 16     |                                     | 156              | 98     | 63          | 37                            | ..... | 55,690          |
|                            | Total.....        | 7                                                               | 7      | 434                                       | 75                                                               | 17     |                                     | 359              | 218    | 61          | 39                            | ..... | 115,240         |
| Sept.                      | Eastern.....      | 2                                                               | 2      | 120                                       | 20                                                               | 17     |                                     | 100              | 46     | 46          | 54                            | ..... | 16,541          |
|                            | Pittsburgh.....   | 2                                                               | 2      | 120                                       | 16                                                               | 13     |                                     | 104              | 104    | 100         | .....                         |       | 45,826          |
|                            | G. L. and M. W. . | 3                                                               | 3      | 180                                       | 28                                                               | 16     |                                     | 152              | 85     | 56          | 44                            | ..... | 49,937          |
|                            | Total.....        | 7                                                               | 7      | 420                                       | 64                                                               | 15     |                                     | 356              | 235    | 66          | 34                            | ..... | 112,304         |
| Oct.                       | Eastern.....      | 2                                                               | 2      | 124                                       | 21                                                               | 17     |                                     | 103              | 47     | 46          | 54                            | ..... | 18,359          |
|                            | Pittsburgh.....   | 2                                                               | 2      | 124                                       | 18                                                               | 15     |                                     | 106              | 99     | 93          | 7                             | ..... | 42,090          |
|                            | G. L. and M. W. . | 3                                                               | 3      | 186                                       | 24                                                               | 13     |                                     | 162              | 63     | 39          | 61                            | ..... | 40,283          |
|                            | Total.....        | 7                                                               | 7      | 434                                       | 63                                                               | 15     |                                     | 371              | 209    | 56          | 44                            | ..... | 100,732         |
| Nov.                       | Eastern.....      | 2                                                               | 2      | 120                                       | 24                                                               | 20     |                                     | 96               | 61     | 64          | 36                            | ..... | 23,606          |
|                            | Pittsburgh.....   | 2                                                               | 2      | 120                                       | 18                                                               | 15     |                                     | 102              | 38     | 37          | 63                            | ..... | 17,668          |
|                            | G. L. and M. W. . | 3                                                               | 3      | 180                                       | 30                                                               | 17     |                                     | 150              | 55     | 37          | 63                            | ..... | 29,968          |
|                            | Total.....        | 7                                                               | 7      | 420                                       | 72                                                               | 17     |                                     | 348              | 154    | 44          | 56                            | ..... | 71,242          |
| Dec.                       | Eastern.....      | 2                                                               | 2      | 124                                       | 22                                                               | 18     |                                     | 102              | 21     | 21          | 79                            | ..... | 10,465          |
|                            | Pittsburgh.....   | 2                                                               | 2      | 124                                       | 20                                                               | 16     |                                     | 104              | 74     | 71          | 29                            | ..... | 31,689          |
|                            | G. L. and M. W. . | 3                                                               | 3      | 186                                       | 32                                                               | 17     |                                     | 154              | 61     | 40          | 60                            | ..... | 37,716          |
|                            | Total.....        | 7                                                               | 7      | 434                                       | 74                                                               | 17     |                                     | 360              | 156    | 43          | 57                            | ..... | 79,870          |

<sup>1</sup> Less than one-half of 1 per cent.

TABLE 10.—TURNS POSSIBLE, TURNS WORKED, AND TOTAL PAY ROLL IN EACH DISTRICT, BY MONTHS, JULY, 1913, TO JUNE, 1915—Continued.

## STANDARD RAIL MILLS—Concluded.

| Year, month, and district. |                   | Number of plants and of stacks, con- erters, furnaces, or mills. |               | Turns possible in period: Maximum number. | Turns customarily not worked (Saturdays, Sundays, and holidays). |               | Turns customarily worked in period. |                  |               |             | Per cent not worked owing to— |  | Total pay roll. |
|----------------------------|-------------------|------------------------------------------------------------------|---------------|-------------------------------------------|------------------------------------------------------------------|---------------|-------------------------------------|------------------|---------------|-------------|-------------------------------|--|-----------------|
|                            |                   |                                                                  |               |                                           |                                                                  |               | Ag- gre- gate number.               | Actually worked. |               |             |                               |  |                 |
|                            |                   |                                                                  |               |                                           |                                                                  |               |                                     |                  |               | Slack work. | All other causes.             |  |                 |
| 1915.                      |                   | <i>Plants.</i>                                                   | <i>Mills.</i> |                                           | <i>No.</i>                                                       | <i>P. ct.</i> |                                     | <i>No.</i>       | <i>P. ct.</i> |             |                               |  |                 |
| Jan.                       | Eastern.....      | 2                                                                | 2             | 124                                       | 25                                                               | 20            | 99                                  | 29               | 29            | 71          | .....                         |  | \$12,798        |
|                            | Pittsburgh.....   | 2                                                                | 2             | 124                                       | 20                                                               | 16            | 104                                 | 56               | 54            | 46          | .....                         |  | 24,214          |
|                            | G.L. and M.W..... | 3                                                                | 3             | 186                                       | 30                                                               | 16            | 156                                 | 69               | 44            | 56          | .....                         |  | 33,771          |
|                            | Total.....        | 7                                                                | 7             | 434                                       | 75                                                               | 17            | 359                                 | 154              | 43            | 57          | .....                         |  | 70,783          |
| Feb.                       | Eastern.....      | 2                                                                | 2             | 112                                       | 20                                                               | 18            | 92                                  | 43               | 47            | 48          | 5                             |  | 15,708          |
|                            | Pittsburgh.....   | 2                                                                | 2             | 112                                       | 16                                                               | 14            | 96                                  | 68               | 71            | 29          | .....                         |  | 30,388          |
|                            | G.L. and M.W..... | 3                                                                | 3             | 168                                       | 24                                                               | 14            | 144                                 | 78               | 54            | 46          | .....                         |  | 35,482          |
|                            | Total.....        | 7                                                                | 7             | 392                                       | 60                                                               | 15            | 332                                 | 189              | 57            | 42          | 2                             |  | 81,578          |
| Mar.                       | Eastern.....      | 2                                                                | 2             | 124                                       | 20                                                               | 16            | 104                                 | 76               | 73            | 26          | 1                             |  | 31,916          |
|                            | Pittsburgh.....   | 2                                                                | 2             | 124                                       | 16                                                               | 13            | 108                                 | 62               | 57            | 43          | .....                         |  | 30,816          |
|                            | G.L. and M.W..... | 3                                                                | 3             | 186                                       | 24                                                               | 13            | 162                                 | 76               | 47            | 37          | 16                            |  | 39,082          |
|                            | Total.....        | 7                                                                | 7             | 434                                       | 60                                                               | 14            | 374                                 | 214              | 57            | 36          | 7                             |  | 101,814         |
| Apr.                       | Eastern.....      | 2                                                                | 2             | 120                                       | 20                                                               | 17            | 100                                 | 75               | 75            | 25          | .....                         |  | 34,288          |
|                            | Pittsburgh.....   | 2                                                                | 2             | 120                                       | 16                                                               | 13            | 104                                 | 50               | 48            | 52          | .....                         |  | 21,744          |
|                            | G.L. and M.W..... | 3                                                                | 3             | 180                                       | 24                                                               | 13            | 156                                 | 92               | 59            | 21          | 20                            |  | 47,122          |
|                            | Total.....        | 7                                                                | 7             | 420                                       | 60                                                               | 14            | 360                                 | 217              | 60            | 31          | 9                             |  | 103,154         |
| May.                       | Eastern.....      | 2                                                                | 2             | 124                                       | 25                                                               | 20            | 99                                  | 74               | 75            | 25          | .....                         |  | 25,579          |
|                            | Pittsburgh.....   | 2                                                                | 2             | 124                                       | 20                                                               | 16            | 104                                 | 104              | 100           | .....       | .....                         |  | 49,788          |
|                            | G.L. and M.W..... | 3                                                                | 3             | 186                                       | 29                                                               | 16            | 157                                 | 127              | 81            | 19          | .....                         |  | 64,121          |
|                            | Total.....        | 7                                                                | 7             | 434                                       | 74                                                               | 17            | 360                                 | 305              | 85            | 15          | .....                         |  | 139,488         |
| June.                      | Eastern.....      | 2                                                                | 2             | 120                                       | 20                                                               | 17            | 100                                 | 74               | 74            | 26          | .....                         |  | 26,628          |
|                            | Pittsburgh.....   | 2                                                                | 2             | 120                                       | 16                                                               | 13            | 104                                 | 104              | 100           | .....       | .....                         |  | 57,414          |
|                            | G.L. and M.W..... | 3                                                                | 3             | 180                                       | 24                                                               | 13            | 156                                 | 120              | 77            | 23          | .....                         |  | 61,523          |
|                            | Total.....        | 7                                                                | 7             | 420                                       | 60                                                               | 14            | 360                                 | 298              | 83            | 17          | .....                         |  | 145,565         |
| 1914-15:                   |                   |                                                                  |               |                                           |                                                                  |               |                                     |                  |               |             |                               |  |                 |
|                            | Eastern.....      | 2                                                                | 2             | 1,460                                     | 264                                                              | 18            | 1,196                               | 650              | 54            | 45          | 1                             |  | 257,200         |
|                            | Pittsburgh.....   | 2                                                                | 2             | 1,460                                     | 215                                                              | 15            | 1,245                               | 956              | 77            | 23          | .....                         |  | 449,370         |
|                            | G.L. and M.W..... | 3                                                                | 3             | 2,190                                     | 329                                                              | 15            | 1,861                               | 1,035            | 56            | 41          | 3                             |  | 554,861         |
|                            | Total.....        | 7                                                                | 7             | 5,110                                     | 808                                                              | 16            | 4,302                               | 2,641            | 61            | 37          | 2                             |  | 1,261,431       |

## BAR MILLS.

|                    |    |     |       |       |    |       |       |    |    |       |  |           |
|--------------------|----|-----|-------|-------|----|-------|-------|----|----|-------|--|-----------|
| 1913.              |    |     |       |       |    |       |       |    |    |       |  |           |
| July. Eastern..... | 16 | 36  | 2,015 | 461   | 23 | 1,554 | 1,132 | 73 | 19 | 8     |  | \$104,087 |
| Pittsburgh.....    | 14 | 41  | 2,635 | 575   | 22 | 2,060 | 1,847 | 90 | 9  | 1     |  | 285,281   |
| G.L. and M.W.....  | 19 | 35  | 2,077 | 467   | 22 | 1,610 | 1,037 | 64 | 15 | 21    |  | 184,450   |
| Southern.....      | 9  | 19  | 837   | 170   | 20 | 667   | 536   | 79 | 9  | 12    |  | 65,028    |
| Total.....         | 58 | 131 | 7,564 | 1,673 | 22 | 5,891 | 4,542 | 77 | 13 | 9     |  | 638,846   |
| Aug. Eastern.....  | 16 | 36  | 2,015 | 487   | 24 | 1,528 | 1,195 | 78 | 22 | ..... |  | 107,859   |
| Pittsburgh.....    | 14 | 41  | 2,635 | 540   | 20 | 2,095 | 1,922 | 92 | 8  | (1)   |  | 289,672   |
| G.L. and M.W.....  | 19 | 35  | 2,077 | 470   | 23 | 1,607 | 1,245 | 77 | 15 | 8     |  | 215,876   |
| Southern.....      | 9  | 19  | 837   | 190   | 23 | 647   | 563   | 87 | 7  | 6     |  | 68,659    |
| Total.....         | 58 | 131 | 7,564 | 1,687 | 22 | 5,877 | 4,925 | 84 | 13 | 3     |  | 682,066   |
| Sept. Eastern..... | 16 | 36  | 1,950 | 438   | 22 | 1,512 | 1,254 | 83 | 17 | ..... |  | 114,806   |
| Pittsburgh.....    | 14 | 41  | 2,550 | 439   | 17 | 2,111 | 1,996 | 95 | 5  | (1)   |  | 320,923   |
| G.L. and M.W.....  | 19 | 35  | 2,010 | 437   | 22 | 1,573 | 1,292 | 82 | 14 | 4     |  | 226,490   |
| Southern.....      | 9  | 19  | 810   | 162   | 20 | 648   | 532   | 82 | 13 | 5     |  | 64,673    |
| Total.....         | 58 | 131 | 7,320 | 1,476 | 20 | 5,844 | 5,074 | 87 | 11 | 2     |  | 708,892   |

<sup>1</sup> Less than one-half of 1 per cent.

TABLE 10.—TURNS POSSIBLE, TURNS WORKED, AND TOTAL PAY ROLL IN EACH DISTRICT, BY MONTHS, JULY, 1913, TO JUNE, 1915—Continued.

## BAR MILLS—Continued.

| Year, month, and district. |                      | Number of plants and of stacks, converters, furnaces, or mills. |        | Turns possible in period: Maximum number. | Turns customarily not worked (Saturdays, Sundays, and holidays). | Turns customarily worked in period. |                  |        |                              |    |             | Total pay roll. |
|----------------------------|----------------------|-----------------------------------------------------------------|--------|-------------------------------------------|------------------------------------------------------------------|-------------------------------------|------------------|--------|------------------------------|----|-------------|-----------------|
|                            |                      |                                                                 |        |                                           |                                                                  | Aggregate number.                   | Actually worked. |        | Percent not worked owing to— |    |             |                 |
|                            |                      |                                                                 |        |                                           |                                                                  |                                     |                  |        |                              |    | Slack work. |                 |
|                            |                      | Plants.                                                         | Mills. | No.                                       | P. ct.                                                           | No.                                 | P. ct.           |        |                              |    |             |                 |
| 1913.                      |                      |                                                                 |        |                                           |                                                                  |                                     |                  |        |                              |    |             |                 |
| Oct.                       | Eastern.....         | 16                                                              | 36     | 2,015                                     | 399                                                              | 20                                  | 1,616            | 1,184  | 73                           | 27 |             | \$112,730       |
|                            | Pittsburgh.....      | 14                                                              | 41     | 2,635                                     | 412                                                              | 16                                  | 2,223            | 2,008  | 90                           | 9  | 1           | 307,832         |
|                            | G. L. and M. W. .... | 19                                                              | 35     | 2,077                                     | 376                                                              | 18                                  | 1,701            | 1,246  | 73                           | 17 | 10          | 228,195         |
|                            | Southern.....        | 9                                                               | 19     | 837                                       | 152                                                              | 18                                  | 685              | 500    | 73                           | 25 | 2           | 60,042          |
|                            | Total.....           | 58                                                              | 131    | 7,564                                     | 1,339                                                            | 18                                  | 6,225            | 4,938  | 79                           | 18 | 3           | 708,799         |
| Nov.                       | Eastern.....         | 16                                                              | 36     | 1,950                                     | 524                                                              | 27                                  | 1,426            | 924    | 65                           | 35 |             | 91,745          |
|                            | Pittsburgh.....      | 14                                                              | 41     | 2,550                                     | 527                                                              | 21                                  | 2,023            | 1,739  | 86                           | 13 | 1           | 256,305         |
|                            | G. L. and M. W. .... | 19                                                              | 35     | 2,010                                     | 486                                                              | 24                                  | 1,524            | 869    | 57                           | 36 | 7           | 160,297         |
|                            | Southern.....        | 9                                                               | 19     | 810                                       | 206                                                              | 25                                  | 604              | 437    | 72                           | 23 | 5           | 48,131          |
|                            | Total.....           | 58                                                              | 131    | 7,320                                     | 1,743                                                            | 24                                  | 5,557            | 3,969  | 71                           | 26 | 3           | 556,478         |
| Dec.                       | Eastern.....         | 16                                                              | 36     | 2,015                                     | 476                                                              | 24                                  | 1,539            | 894    | 58                           | 36 | 6           | 83,612          |
|                            | Pittsburgh.....      | 14                                                              | 41     | 2,635                                     | 548                                                              | 21                                  | 2,087            | 1,435  | 69                           | 20 | 11          | 199,492         |
|                            | G. L. and M. W. .... | 19                                                              | 35     | 2,077                                     | 482                                                              | 23                                  | 1,595            | 852    | 53                           | 38 | 8           | 153,171         |
|                            | Southern.....        | 9                                                               | 19     | 837                                       | 201                                                              | 24                                  | 636              | 371    | 58                           | 31 | 10          | 42,051          |
|                            | Total.....           | 58                                                              | 131    | 7,564                                     | 1,707                                                            | 23                                  | 5,857            | 3,552  | 61                           | 31 | 9           | 478,326         |
| 1914.                      |                      |                                                                 |        |                                           |                                                                  |                                     |                  |        |                              |    |             |                 |
| Jan.                       | Eastern.....         | 16                                                              | 36     | 2,015                                     | 457                                                              | 23                                  | 1,558            | 937    | 60                           | 37 | 3           | 89,817          |
|                            | Pittsburgh.....      | 14                                                              | 41     | 2,635                                     | 451                                                              | 17                                  | 2,184            | 1,573  | 72                           | 26 | 2           | 213,525         |
|                            | G. L. and M. W. .... | 19                                                              | 35     | 2,077                                     | 420                                                              | 20                                  | 1,657            | 930    | 56                           | 39 | 5           | 162,350         |
|                            | Southern.....        | 9                                                               | 19     | 837                                       | 166                                                              | 20                                  | 671              | 420    | 63                           | 34 | 4           | 40,248          |
|                            | Total.....           | 58                                                              | 131    | 7,564                                     | 1,494                                                            | 20                                  | 6,070            | 3,860  | 64                           | 33 | 3           | 511,940         |
| Feb.                       | Eastern.....         | 16                                                              | 36     | 1,820                                     | 392                                                              | 22                                  | 1,428            | 1,021  | 71                           | 29 |             | 98,322          |
|                            | Pittsburgh.....      | 14                                                              | 41     | 2,380                                     | 412                                                              | 17                                  | 1,968            | 1,551  | 79                           | 21 | 1           | 225,313         |
|                            | G. L. and M. W. .... | 19                                                              | 35     | 1,876                                     | 376                                                              | 20                                  | 1,500            | 1,048  | 70                           | 27 | 4           | 182,065         |
|                            | Southern.....        | 9                                                               | 19     | 756                                       | 152                                                              | 20                                  | 604              | 389    | 64                           | 34 | 2           | 42,319          |
|                            | Total.....           | 58                                                              | 131    | 6,832                                     | 1,332                                                            | 19                                  | 5,500            | 4,009  | 73                           | 26 | 1           | 518,019         |
| Mar.                       | Eastern.....         | 16                                                              | 36     | 2,015                                     | 454                                                              | 23                                  | 1,561            | 930    | 60                           | 38 | 2           | 92,323          |
|                            | Pittsburgh.....      | 14                                                              | 41     | 2,635                                     | 476                                                              | 18                                  | 2,159            | 1,760  | 82                           | 17 | 1           | 246,986         |
|                            | G. L. and M. W. .... | 19                                                              | 35     | 2,077                                     | 443                                                              | 21                                  | 1,634            | 1,091  | 67                           | 31 | 3           | 191,347         |
|                            | Southern.....        | 9                                                               | 19     | 837                                       | 179                                                              | 21                                  | 658              | 381    | 58                           | 37 | 5           | 44,511          |
|                            | Total.....           | 58                                                              | 131    | 7,564                                     | 1,552                                                            | 21                                  | 6,012            | 4,162  | 69                           | 29 | 2           | 575,167         |
| Apr.                       | Eastern.....         | 16                                                              | 36     | 1,950                                     | 400                                                              | 21                                  | 1,550            | 953    | 61                           | 37 | 2           | 89,490          |
|                            | Pittsburgh.....      | 14                                                              | 41     | 2,550                                     | 424                                                              | 17                                  | 2,126            | 1,499  | 71                           | 26 | 4           | 211,597         |
|                            | G. L. and M. W. .... | 19                                                              | 35     | 2,010                                     | 376                                                              | 19                                  | 1,634            | 920    | 56                           | 41 | 3           | 160,697         |
|                            | Southern.....        | 9                                                               | 19     | 810                                       | 152                                                              | 19                                  | 658              | 444    | 67                           | 29 | 4           | 47,971          |
|                            | Total.....           | 58                                                              | 131    | 7,320                                     | 1,352                                                            | 18                                  | 5,968            | 3,816  | 64                           | 33 | 3           | 509,755         |
| May.                       | Eastern.....         | 16                                                              | 36     | 2,015                                     | 509                                                              | 25                                  | 1,506            | 753    | 50                           | 48 | 2           | 69,878          |
|                            | Pittsburgh.....      | 14                                                              | 41     | 2,635                                     | 539                                                              | 20                                  | 2,096            | 1,190  | 57                           | 40 | 3           | 178,781         |
|                            | G. L. and M. W. .... | 19                                                              | 35     | 2,077                                     | 480                                                              | 23                                  | 1,597            | 865    | 54                           | 41 | 4           | 151,584         |
|                            | Southern.....        | 9                                                               | 19     | 837                                       | 196                                                              | 23                                  | 641              | 417    | 65                           | 28 | 7           | 46,975          |
|                            | Total.....           | 58                                                              | 131    | 7,564                                     | 1,724                                                            | 23                                  | 5,840            | 3,225  | 55                           | 41 | 3           | 447,218         |
| June.                      | Eastern.....         | 16                                                              | 36     | 1,950                                     | 391                                                              | 20                                  | 1,559            | 880    | 56                           | 43 | 1           | 77,771          |
|                            | Pittsburgh.....      | 14                                                              | 41     | 2,550                                     | 432                                                              | 17                                  | 2,118            | 1,345  | 64                           | 35 | 2           | 194,300         |
|                            | G. L. and M. W. .... | 19                                                              | 35     | 2,010                                     | 376                                                              | 19                                  | 1,634            | 805    | 49                           | 40 | 11          | 151,506         |
|                            | Southern.....        | 9                                                               | 19     | 810                                       | 152                                                              | 19                                  | 658              | 482    | 73                           | 22 | 5           | 52,751          |
|                            | Total.....           | 58                                                              | 131    | 7,320                                     | 1,351                                                            | 18                                  | 5,969            | 3,512  | 59                           | 37 | 4           | 476,528         |
| 1913-14:                   |                      |                                                                 |        |                                           |                                                                  |                                     |                  |        |                              |    |             |                 |
|                            | Eastern.....         | 16                                                              | 36     | 23,725                                    | 5,388                                                            | 23                                  | 18,337           | 12,057 | 66                           | 32 | 2           | 1,132,640       |
|                            | Pittsburgh.....      | 14                                                              | 41     | 31,025                                    | 5,775                                                            | 19                                  | 25,250           | 19,865 | 79                           | 19 | 2           | 2,912,007       |
|                            | G. L. and M. W. .... | 19                                                              | 35     | 24,455                                    | 5,189                                                            | 21                                  | 19,266           | 12,200 | 63                           | 29 | 7           | 2,168,028       |
|                            | Southern.....        | 9                                                               | 19     | 9,855                                     | 2,078                                                            | 21                                  | 7,777            | 5,462  | 70                           | 24 | 6           | 629,359         |
|                            | Total.....           | 58                                                              | 131    | 89,060                                    | 18,430                                                           | 21                                  | 70,630           | 49,584 | 70                           | 26 | 4           | 6,842,034       |

TABLE 10.—TURNS POSSIBLE, TURNS WORKED, AND TOTAL PAY ROLL IN EACH DISTRICT, BY MONTHS, JULY, 1913, TO JUNE, 1915—Continued.

BAR MILLS—Continued.

| Year, month, and district. |                     | Number of plants and of stacks, converters, furnaces, or mills. |               | Turns possible in period: Maximum number. | Turns customarily not worked (Saturdays, Sundays, and holidays). |               | Turns customarily worked in period. |                  |               |             | Per cent not worked owing to— |    | Total pay roll. |
|----------------------------|---------------------|-----------------------------------------------------------------|---------------|-------------------------------------------|------------------------------------------------------------------|---------------|-------------------------------------|------------------|---------------|-------------|-------------------------------|----|-----------------|
|                            |                     |                                                                 |               |                                           |                                                                  |               | Aggregate number.                   | Actually worked. |               |             |                               |    |                 |
|                            |                     |                                                                 |               |                                           |                                                                  |               |                                     |                  |               | Slack work. | All other causes.             |    |                 |
| 1914.                      |                     | <i>Plants.</i>                                                  | <i>mills.</i> |                                           | <i>No.</i>                                                       | <i>P. ct.</i> |                                     | <i>No.</i>       | <i>P. ct.</i> |             |                               |    |                 |
| July.                      | Eastern.....        | 16                                                              | 36            | 2,015                                     | 427                                                              | 21            | 1,588                               | 812              | 51            | 38          |                               | 11 | \$80,964        |
|                            | Pittsburgh.....     | 14                                                              | 41            | 2,635                                     | 527                                                              | 20            | 2,108                               | 1,544            | 73            | 24          |                               | 3  | 214,969         |
|                            | G. L. and M. W..... | 19                                                              | 35            | 2,077                                     | 428                                                              | 21            | 1,649                               | 972              | 59            | 35          |                               | 6  | 174,749         |
|                            | Southern.....       | 9                                                               | 19            | 806                                       | 150                                                              | 19            | 656                                 | 387              | 59            | 31          |                               | 10 | 46,686          |
|                            | Total.....          | 58                                                              | 31            | 7,533                                     | 1,532                                                            | 20            | 6,001                               | 3,715            | 62            | 32          |                               | 6  | 517,368         |
| Aug.                       | Eastern.....        | 16                                                              | 36            | 2,015                                     | 480                                                              | 24            | 1,535                               | 856              | 56            | 41          |                               | 3  | 80,824          |
|                            | Pittsburgh.....     | 14                                                              | 41            | 2,635                                     | 570                                                              | 22            | 2,065                               | 1,499            | 73            | 27          |                               | 1  | 209,918         |
|                            | G. L. and M. W..... | 19                                                              | 35            | 2,077                                     | 471                                                              | 23            | 1,606                               | 1,048            | 65            | 33          |                               | 2  | 193,062         |
|                            | Southern.....       | 9                                                               | 19            | 806                                       | 175                                                              | 22            | 631                                 | 394              | 62            | 29          |                               | 8  | 46,194          |
|                            | Total.....          | 58                                                              | 131           | 7,533                                     | 1,696                                                            | 23            | 5,837                               | 3,797            | 65            | 33          |                               | 2  | 529,998         |
| Sept.                      | Eastern.....        | 16                                                              | 36            | 1,950                                     | 440                                                              | 23            | 1,510                               | 799              | 53            | 47          |                               |    | 76,326          |
|                            | Pittsburgh.....     | 14                                                              | 41            | 2,550                                     | 507                                                              | 20            | 2,043                               | 1,464            | 72            | 28          |                               | 1  | 206,358         |
|                            | G. L. and M. W..... | 19                                                              | 35            | 2,010                                     | 437                                                              | 22            | 1,573                               | 989              | 63            | 35          |                               | 2  | 181,471         |
|                            | Southern.....       | 9                                                               | 19            | 780                                       | 150                                                              | 19            | 630                                 | 354              | 56            | 34          |                               | 9  | 42,163          |
|                            | Total.....          | 58                                                              | 131           | 7,290                                     | 1,534                                                            | 21            | 5,756                               | 3,606            | 63            | 35          |                               | 2  | 506,318         |
| Oct.                       | Eastern.....        | 16                                                              | 36            | 2,015                                     | 415                                                              | 21            | 1,600                               | 677              | 42            | 58          | (1)                           |    | 63,165          |
|                            | Pittsburgh.....     | 14                                                              | 41            | 2,635                                     | 493                                                              | 19            | 2,142                               | 1,285            | 60            | 38          |                               | 2  | 176,842         |
|                            | G. L. and M. W..... | 19                                                              | 35            | 2,077                                     | 403                                                              | 19            | 1,674                               | 853              | 51            | 48          |                               | 1  | 162,340         |
|                            | Southern.....       | 9                                                               | 19            | 806                                       | 148                                                              | 18            | 658                                 | 391              | 59            | 32          |                               | 9  | 44,708          |
|                            | Total.....          | 58                                                              | 131           | 7,533                                     | 1,459                                                            | 19            | 6,074                               | 3,206            | 53            | 45          |                               | 2  | 447,055         |
| Nov.                       | Eastern.....        | 16                                                              | 36            | 1,950                                     | 478                                                              | 25            | 1,472                               | 801              | 41            | 59          | (1)                           |    | 61,355          |
|                            | Pittsburgh.....     | 14                                                              | 41            | 2,550                                     | 510                                                              | 20            | 2,040                               | 980              | 48            | 50          |                               | 2  | 140,953         |
|                            | G. L. and M. W..... | 19                                                              | 35            | 2,010                                     | 469                                                              | 23            | 1,541                               | 998              | 39            | 60          |                               | 1  | 119,380         |
|                            | Southern.....       | 9                                                               | 19            | 780                                       | 186                                                              | 24            | 594                                 | 274              | 46            | 54          |                               |    | 32,010          |
|                            | Total.....          | 58                                                              | 131           | 7,290                                     | 1,643                                                            | 23            | 5,647                               | 2,453            | 43            | 56          |                               | 1  | 353,698         |
| Dec.                       | Eastern.....        | 16                                                              | 36            | 2,015                                     | 477                                                              | 24            | 1,538                               | 675              | 44            | 54          |                               | 2  | 65,857          |
|                            | Pittsburgh.....     | 14                                                              | 41            | 2,635                                     | 558                                                              | 21            | 2,077                               | 1,123            | 54            | 41          |                               | 5  | 152,409         |
|                            | G. L. and M. W..... | 19                                                              | 35            | 2,077                                     | 463                                                              | 22            | 1,614                               | 729              | 45            | 51          |                               | 4  | 134,762         |
|                            | Southern.....       | 9                                                               | 19            | 806                                       | 181                                                              | 22            | 625                                 | 252              | 40            | 60          |                               |    | 29,538          |
|                            | Total.....          | 58                                                              | 131           | 7,533                                     | 1,679                                                            | 22            | 5,854                               | 2,779            | 47            | 49          |                               | 3  | 382,566         |
| 1915.                      |                     |                                                                 |               |                                           |                                                                  |               |                                     |                  |               |             |                               |    |                 |
| Jan.                       | Eastern.....        | 16                                                              | 36            | 2,015                                     | 508                                                              | 25            | 1,507                               | 756              | 50            | 47          |                               | 3  | 76,495          |
|                            | Pittsburgh.....     | 14                                                              | 41            | 2,635                                     | 545                                                              | 21            | 2,090                               | 1,340            | 64            | 33          |                               | 3  | 184,838         |
|                            | G. L. and M. W..... | 19                                                              | 35            | 2,077                                     | 482                                                              | 23            | 1,595                               | 723              | 45            | 53          |                               | 2  | 139,783         |
|                            | Southern.....       | 9                                                               | 19            | 806                                       | 175                                                              | 22            | 631                                 | 291              | 46            | 54          |                               |    | 34,348          |
|                            | Total.....          | 58                                                              | 131           | 7,533                                     | 1,710                                                            | 23            | 5,823                               | 3,110            | 53            | 44          |                               | 2  | 435,464         |
| Feb.                       | Eastern.....        | 16                                                              | 36            | 1,820                                     | 388                                                              | 21            | 1,432                               | 711              | 50            | 49          | (1)                           |    | 66,835          |
|                            | Pittsburgh.....     | 14                                                              | 41            | 2,380                                     | 436                                                              | 18            | 1,944                               | 1,308            | 67            | 30          |                               | 2  | 178,480         |
|                            | G. L. and M. W..... | 19                                                              | 35            | 1,876                                     | 376                                                              | 20            | 1,500                               | 837              | 56            | 42          |                               | 2  | 157,627         |
|                            | Southern.....       | 9                                                               | 19            | 728                                       | 140                                                              | 19            | 588                                 | 271              | 46            | 48          |                               | 6  | 34,495          |
|                            | Total.....          | 58                                                              | 121           | 6,804                                     | 1,340                                                            | 20            | 5,464                               | 3,127            | 57            | 40          |                               | 2  | 437,437         |
| Mar.                       | Eastern.....        | 16                                                              | 36            | 2,015                                     | 391                                                              | 19            | 1,624                               | 925              | 57            | 43          | (1)                           |    | 84,419          |
|                            | Pittsburgh.....     | 14                                                              | 41            | 2,635                                     | 436                                                              | 17            | 2,199                               | 1,546            | 70            | 28          |                               | 1  | 219,936         |
|                            | G. L. and M. W..... | 19                                                              | 35            | 2,077                                     | 376                                                              | 18            | 1,701                               | 723              | 43            | 55          |                               | 3  | 140,984         |
|                            | Southern.....       | 9                                                               | 19            | 806                                       | 143                                                              | 18            | 663                                 | 316              | 48            | 50          |                               | 2  | 37,668          |
|                            | Total.....          | 58                                                              | 131           | 7,533                                     | 1,346                                                            | 18            | 6,187                               | 3,510            | 57            | 42          |                               | 2  | 493,007         |
| Apr.                       | Eastern.....        | 16                                                              | 36            | 1,950                                     | 386                                                              | 20            | 1,564                               | 904              | 58            | 41          |                               | 1  | 88,429          |
|                            | Pittsburgh.....     | 14                                                              | 41            | 2,550                                     | 444                                                              | 17            | 2,106                               | 1,652            | 78            | 21          |                               | 1  | 230,674         |
|                            | G. L. and M. W..... | 19                                                              | 35            | 2,010                                     | 376                                                              | 19            | 1,634                               | 863              | 53            | 44          |                               | 3  | 154,914         |
|                            | Southern.....       | 9                                                               | 19            | 780                                       | 140                                                              | 18            | 640                                 | 330              | 52            | 46          |                               | 2  | 36,967          |
|                            | Total.....          | 58                                                              | 131           | 7,290                                     | 1,346                                                            | 18            | 5,944                               | 3,749            | 63            | 36          |                               | 1  | 510,984         |

<sup>1</sup> Less than one-half of 1 per cent.

TABLE 10.—TURNS POSSIBLE, TURNS WORKED, AND TOTAL PAY ROLL IN EACH DISTRICT, BY MONTHS, JULY, 1913, TO JUNE, 1915—Continued.

## BAR MILLS—Concluded.

| Year, month, and district. | Number of plants and of stacks, converters, furnaces, or mills. |               | Turns possible in period: Maximum number. | Turns customarily not worked (Saturdays, Sundays, and holidays). |               | Turns customarily worked in period. |                  |               |             | Per cent not worked owing to— |   | Total pay roll. |
|----------------------------|-----------------------------------------------------------------|---------------|-------------------------------------------|------------------------------------------------------------------|---------------|-------------------------------------|------------------|---------------|-------------|-------------------------------|---|-----------------|
|                            |                                                                 |               |                                           |                                                                  |               | Aggregate number.                   | Actually worked. |               |             |                               |   |                 |
|                            |                                                                 |               |                                           |                                                                  |               |                                     |                  |               | Slack work. | All other causes.             |   |                 |
| 1915.                      | <i>Plants.</i>                                                  | <i>Mills.</i> |                                           | <i>No.</i>                                                       | <i>P. ct.</i> |                                     | <i>No.</i>       | <i>P. ct.</i> |             |                               |   |                 |
| May. Eastern.....          | 16                                                              | 36            | 2,015                                     | 516                                                              | 26            | 1,499                               | 941              | 63            | 37          | (1)                           |   | \$89,572        |
| Pittsburgh.....            | 14                                                              | 41            | 2,635                                     | 565                                                              | 21            | 2,070                               | 1,649            | 80            | 19          |                               | 1 | 235,508         |
| G. L. and M. W.....        | 19                                                              | 35            | 2,077                                     | 481                                                              | 23            | 1,596                               | 795              | 50            | 48          |                               | 3 | 145,240         |
| Southern.....              | 9                                                               | 19            | 806                                       | 175                                                              | 22            | 631                                 | 339              | 54            | 46          |                               | 1 | 37,754          |
| Total.....                 | 58                                                              | 131           | 7,533                                     | 1,731                                                            | 23            | 5,796                               | 3,724            | 64            | 35          |                               | 1 | 508,074         |
| June. Eastern.....         | 16                                                              | 36            | 1,950                                     | 384                                                              | 20            | 1,566                               | 999              | 64            | 36          |                               |   | 93,297          |
| Pittsburgh.....            | 14                                                              | 41            | 2,550                                     | 456                                                              | 18            | 2,094                               | 1,800            | 86            | 13          |                               | 1 | 256,421         |
| G. L. and M. W.....        | 19                                                              | 35            | 2,010                                     | 376                                                              | 19            | 1,634                               | 905              | 55            | 42          |                               | 3 | 161,187         |
| Southern.....              | 9                                                               | 19            | 780                                       | 140                                                              | 18            | 640                                 | 389              | 61            | 39          | (1)                           |   | 44,091          |
| Total.....                 | 58                                                              | 131           | 7,290                                     | 1,356                                                            | 19            | 5,934                               | 4,093            | 60            | 30          |                               | 1 | 554,996         |
| 1914-15:                   |                                                                 |               |                                           |                                                                  |               |                                     |                  |               |             |                               |   |                 |
| Eastern.....               | 16                                                              | 36            | 23,725                                    | 5,290                                                            | 22            | 18,435                              | 9,656            | 53            | 45          |                               | 2 | 977,538         |
| Pittsburgh.....            | 14                                                              | 41            | 31,025                                    | 6,047                                                            | 19            | 24,978                              | 17,190           | 69            | 29          |                               | 2 | 2,407,306       |
| G. L. and M. W.....        | 19                                                              | 35            | 24,455                                    | 5,138                                                            | 21            | 19,317                              | 10,035           | 52            | 46          |                               | 3 | 1,865,499       |
| Southern.....              | 9                                                               | 19            | 9,490                                     | 1,903                                                            | 20            | 7,587                               | 3,988            | 53            | 43          |                               | 4 | 466,622         |
| Total.....                 | 58                                                              | 131           | 88,695                                    | 18,378                                                           | 21            | 70,317                              | 40,869           | 58            | 40          |                               | 2 | 5,676,965       |

## SHEET MILLS.

|       |                     |    |     |        |       |    |        |       |    |    |     |    |           |
|-------|---------------------|----|-----|--------|-------|----|--------|-------|----|----|-----|----|-----------|
| 1913. |                     |    |     |        |       |    |        |       |    |    |     |    |           |
| July. | Pittsburgh.....     | 10 | 91  | 8,463  | 2,126 | 25 | 6,337  | 5,037 | 79 | 14 |     | 6  | \$349,670 |
|       | G. L. and M. W..... | 5  | 46  | 4,278  | 1,018 | 24 | 3,260  | 1,976 | 61 | 12 |     | 27 | 133,119   |
|       | Total.....          | 15 | 137 | 12,741 | 3,144 | 25 | 9,597  | 7,013 | 73 | 13 |     | 13 | 482,789   |
| Aug.  | Pittsburgh.....     | 10 | 91  | 8,463  | 2,275 | 27 | 6,188  | 5,012 | 81 | 15 |     | 4  | 375,510   |
|       | G. L. and M. W..... | 5  | 46  | 4,278  | 1,148 | 27 | 3,130  | 2,359 | 75 | 23 |     | 2  | 153,839   |
|       | Total.....          | 15 | 137 | 12,741 | 3,423 | 27 | 9,318  | 7,371 | 79 | 18 |     | 3  | 529,349   |
| Sept. | Pittsburgh.....     | 10 | 91  | 8,190  | 1,958 | 24 | 6,232  | 4,630 | 74 | 24 |     | 2  | 338,597   |
|       | G. L. and M. W..... | 5  | 46  | 4,140  | 997   | 24 | 3,143  | 2,427 | 77 | 20 |     | 2  | 159,475   |
|       | Total.....          | 15 | 137 | 12,330 | 2,955 | 24 | 9,375  | 7,057 | 75 | 23 |     | 2  | 498,072   |
| Oct.  | Pittsburgh.....     | 10 | 91  | 8,463  | 1,820 | 22 | 6,643  | 4,883 | 74 | 26 | (1) |    | 356,429   |
|       | G. L. and M. W..... | 5  | 46  | 4,278  | 892   | 21 | 3,386  | 2,799 | 83 | 17 | (1) |    | 186,112   |
|       | Total.....          | 15 | 137 | 12,741 | 2,712 | 21 | 10,029 | 7,682 | 77 | 23 | (1) |    | 542,541   |
| Nov.  | Pittsburgh.....     | 10 | 91  | 8,190  | 2,299 | 28 | 5,891  | 3,643 | 62 | 38 | (1) |    | 276,687   |
|       | G. L. and M. W..... | 5  | 46  | 4,140  | 1,115 | 27 | 3,025  | 2,416 | 80 | 17 |     | 3  | 160,886   |
|       | Total.....          | 15 | 137 | 12,330 | 3,414 | 28 | 8,916  | 6,059 | 68 | 31 |     | 1  | 437,573   |
| Dec.  | Pittsburgh.....     | 10 | 91  | 8,463  | 2,174 | 26 | 6,289  | 3,124 | 50 | 43 |     | 7  | 245,368   |
|       | G. L. and M. W..... | 5  | 46  | 4,278  | 1,030 | 24 | 3,248  | 2,168 | 67 | 25 |     | 9  | 145,745   |
|       | Total.....          | 15 | 137 | 12,741 | 3,204 | 25 | 9,537  | 5,292 | 55 | 37 |     | 8  | 391,113   |
| 1914. |                     |    |     |        |       |    |        |       |    |    |     |    |           |
| Jan.  | Pittsburgh.....     | 10 | 91  | 8,463  | 2,002 | 24 | 6,461  | 3,871 | 60 | 34 |     | 6  | 318,541   |
|       | G. L. and M. W..... | 5  | 46  | 4,278  | 977   | 23 | 3,301  | 2,454 | 74 | 26 | (1) |    | 183,131   |
|       | Total.....          | 15 | 137 | 12,741 | 2,979 | 23 | 9,762  | 6,325 | 65 | 31 |     | 4  | 501,672   |
| Feb.  | Pittsburgh.....     | 10 | 91  | 7,644  | 1,820 | 24 | 5,824  | 4,473 | 77 | 20 |     | 3  | 332,820   |
|       | G. L. and M. W..... | 5  | 46  | 3,864  | 892   | 23 | 2,972  | 2,265 | 76 | 24 | (1) |    | 169,027   |
|       | Total.....          | 15 | 137 | 11,508 | 2,712 | 24 | 8,796  | 6,738 | 77 | 21 |     | 2  | 501,847   |
| Mar.  | Pittsburgh.....     | 10 | 91  | 8,463  | 2,093 | 25 | 6,370  | 4,976 | 78 | 17 |     | 5  | 370,308   |
|       | G. L. and M. W..... | 5  | 46  | 4,278  | 1,030 | 24 | 3,248  | 2,679 | 82 | 18 |     |    | 182,853   |
|       | Total.....          | 15 | 137 | 12,741 | 3,123 | 25 | 9,618  | 7,655 | 80 | 17 |     | 3  | 553,161   |

<sup>1</sup> Less than one-half of 1 per cent.

TABLE 10.—TURNS POSSIBLE, TURNS WORKED, AND TOTAL PAY ROLL IN EACH DISTRICT, BY MONTHS, JULY, 1913, TO JUNE, 1915—Continued.

## SHEET MILLS—Continued.

| Year, month, and district. |                 | Number of plants and of stacks, converters, furnaces, or mills. |                 | Turns possible in period: Maximum number. | Turns customarily not worked (Saturdays, Sundays, and holidays). |        | Turns customarily worked in period. |                  |        |                               |                   |           | Total pay roll. |  |
|----------------------------|-----------------|-----------------------------------------------------------------|-----------------|-------------------------------------------|------------------------------------------------------------------|--------|-------------------------------------|------------------|--------|-------------------------------|-------------------|-----------|-----------------|--|
|                            |                 |                                                                 |                 |                                           |                                                                  |        | Aggregate number                    | Actually worked. |        | Per cent not worked owing to— |                   |           |                 |  |
|                            |                 |                                                                 |                 |                                           |                                                                  |        |                                     |                  |        | Slack work.                   | All other causes. |           |                 |  |
|                            |                 | Plants.                                                         | Mills.          |                                           | No.                                                              | P. ct. |                                     | No.              | P. ct. |                               |                   |           |                 |  |
| 1914.                      | Pittsburgh      | 10                                                              | 91              | 8,190                                     | 1,820                                                            | 22     | 6,370                               | 4,779            | 75     | 20                            | 5                 | \$356,103 |                 |  |
| Apr.                       | G. L. and M. W. | 5                                                               | 46              | 4,140                                     | 892                                                              | 22     | 3,248                               | 2,921            | 90     | 10                            |                   | 200,728   |                 |  |
|                            | Total.....      | 15                                                              | 137             | 12,330                                    | 2,712                                                            | 22     | 9,618                               | 7,700            | 80     | 16                            | 3                 | 556,831   |                 |  |
| May.                       | Pittsburgh      | 10                                                              | 91              | 8,463                                     | 2,275                                                            | 27     | 6,188                               | 3,679            | 59     | 38                            | 2                 | 267,082   |                 |  |
|                            | G. L. and M. W. | 5                                                               | 46              | 4,278                                     | 1,115                                                            | 26     | 3,163                               | 2,453            | 78     | 14                            | 8                 | 159,869   |                 |  |
|                            | Total.....      | 15                                                              | 137             | 12,741                                    | 3,390                                                            | 27     | 9,351                               | 6,132            | 66     | 30                            | 4                 | 426,951   |                 |  |
| June.                      | Pittsburgh      | 10                                                              | 91              | 8,190                                     | 1,820                                                            | 22     | 6,370                               | 4,263            | 67     | 29                            | 4                 | 308,302   |                 |  |
|                            | G. L. and M. W. | 5                                                               | 46              | 4,140                                     | 829                                                              | 22     | 3,248                               | 2,172            | 67     | 29                            | 4                 | 129,666   |                 |  |
|                            | Total.....      | 15                                                              | 137             | 12,330                                    | 2,712                                                            | 22     | 9,618                               | 6,435            | 67     | 29                            | 4                 | 437,968   |                 |  |
| 1913-14:                   | Pittsburgh      | 10                                                              | 91              | 99,645                                    | 24,482                                                           | 25     | 75,163                              | 52,370           | 70     | 27                            | 4                 | 3,895,417 |                 |  |
|                            | G. L. and M. W. | 5                                                               | 46              | 50,370                                    | 11,998                                                           | 24     | 38,372                              | 29,089           | 76     | 20                            | 5                 | 1,964,450 |                 |  |
|                            | Total.....      | 15                                                              | 137             | 150,015                                   | 36,480                                                           | 24     | 113,535                             | 81,459           | 72     | 24                            | 4                 | 5,859,867 |                 |  |
| 1914.                      | Pittsburgh      | 10                                                              | 92              | 8,556                                     | 2,002                                                            | 23     | 6,554                               | 4,206            | 64     | 14                            | 22                | 338,682   |                 |  |
| July.                      | G. L. and M. W. | 5                                                               | 46              | 4,278                                     | 978                                                              | 23     | 3,300                               | 2,021            | 61     | 13                            | 26                | 122,366   |                 |  |
|                            | Total.....      | 15                                                              | 138             | 12,834                                    | 2,980                                                            | 23     | 9,854                               | 6,227            | 63     | 13                            | 23                | 461,048   |                 |  |
| Aug.                       | Pittsburgh      | 10                                                              | 92              | 8,556                                     | 2,300                                                            | 27     | 6,256                               | 4,922            | 79     | 11                            | 10                | 385,866   |                 |  |
|                            | G. L. and M. W. | 5                                                               | 46              | 4,278                                     | 1,148                                                            | 27     | 3,130                               | 2,693            | 86     | 10                            | 4                 | 163,172   |                 |  |
|                            | Total.....      | 15                                                              | 138             | 12,834                                    | 3,448                                                            | 27     | 9,386                               | 7,615            | 81     | 11                            | 8                 | 549,038   |                 |  |
| Sept.                      | Pittsburgh      | 10                                                              | 92              | 8,280                                     | 2,048                                                            | 25     | 6,232                               | 4,806            | 77     | 10                            | 13                | 395,302   |                 |  |
|                            | G. L. and M. W. | 5                                                               | 46              | 4,140                                     | 1,004                                                            | 24     | 3,136                               | 2,844            | 91     | 7                             | 2                 | 179,261   |                 |  |
|                            | Total.....      | 15                                                              | 138             | 12,420                                    | 3,052                                                            | 25     | 9,368                               | 7,650            | 82     | 9                             | 9                 | 574,563   |                 |  |
| Oct.                       | Pittsburgh      | 10                                                              | 92              | 8,556                                     | 2,024                                                            | 24     | 6,532                               | 3,878            | 59     | 34                            | 7                 | 327,229   |                 |  |
|                            | G. L. and M. W. | 5                                                               | 46              | 4,278                                     | 977                                                              | 23     | 3,301                               | 2,773            | 84     | 16                            |                   | 168,566   |                 |  |
|                            | Total.....      | 15                                                              | 138             | 12,834                                    | 3,001                                                            | 23     | 9,833                               | 6,651            | 68     | 28                            | 5                 | 495,795   |                 |  |
| Nov.                       | Pittsburgh      | 10                                                              | 92              | 8,280                                     | 2,140                                                            | 26     | 6,140                               | 2,465            | 40     | 57                            | 3                 | 212,143   |                 |  |
|                            | G. L. and M. W. | 5                                                               | 46              | 4,140                                     | 1,030                                                            | 25     | 3,110                               | 2,174            | 70     | 30                            | (1)               | 137,543   |                 |  |
|                            | Total.....      | 15                                                              | 138             | 12,420                                    | 3,170                                                            | 26     | 9,250                               | 4,639            | 50     | 48                            | 2                 | 349,686   |                 |  |
| Dec.                       | Pittsburgh      | 10                                                              | 92              | 8,556                                     | 2,188                                                            | 26     | 6,368                               | 2,710            | 43     | 50                            | 7                 | 243,869   |                 |  |
|                            | G. L. and M. W. | 5                                                               | 46              | 4,278                                     | 1,020                                                            | 24     | 3,258                               | 1,614            | 50     | 46                            | 4                 | 106,146   |                 |  |
|                            | Total.....      | 15                                                              | 138             | 12,834                                    | 3,208                                                            | 25     | 9,626                               | 4,324            | 45     | 49                            | 6                 | 350,015   |                 |  |
| 1915.                      | Pittsburgh      | 10                                                              | <sup>2</sup> 95 | 8,835                                     | 2,375                                                            | 27     | 6,460                               | 3,421            | 53     | 43                            | 4                 | 294,980   |                 |  |
| Jan.                       | G. L. and M. W. | 5                                                               | 46              | 4,278                                     | 1,150                                                            | 27     | 3,128                               | 2,008            | 64     | 36                            | (1)               | 128,226   |                 |  |
|                            | Total.....      | 15                                                              | 141             | 13,113                                    | 3,525                                                            | 27     | 9,588                               | 5,429            | 57     | 40                            | 3                 | 423,206   |                 |  |
| Feb.                       | Pittsburgh      | 10                                                              | 95              | 7,980                                     | 1,900                                                            | 24     | 6,080                               | 3,975            | 65     | 28                            | 6                 | 325,599   |                 |  |
|                            | G. L. and M. W. | 5                                                               | <sup>2</sup> 47 | 3,906                                     | 900                                                              | 23     | 3,006                               | 2,063            | 69     | 31                            | (1)               | 124,612   |                 |  |
|                            | Total.....      | 15                                                              | 142             | 11,886                                    | 2,800                                                            | 24     | 9,086                               | 6,038            | 66     | 29                            | 4                 | 450,211   |                 |  |
| Mar.                       | Pittsburgh      | 10                                                              | 95              | 8,835                                     | 1,900                                                            | 22     | 6,935                               | 4,756            | 69     | 28                            | 3                 | 395,272   |                 |  |
|                            | G. L. and M. W. | 5                                                               | 47              | 4,371                                     | 908                                                              | 21     | 3,463                               | 2,495            | 72     | 28                            | (1)               | 156,130   |                 |  |
|                            | Total.....      | 15                                                              | 142             | 13,206                                    | 2,808                                                            | 21     | 10,398                              | 7,251            | 70     | 28                            | 2                 | 551,402   |                 |  |

<sup>1</sup> Less than one-half of 1 per cent.<sup>2</sup> 92 mills prior to Jan. 1.<sup>3</sup> 46 mills prior to Feb. 15.



TABLE 10.—TURNS POSSIBLE, TURNS WORKED, AND TOTAL PAY ROLL IN EACH DISTRICT, BY MONTHS, JULY, 1913, TO JUNE, 1915—Continued.

## SHEET MILLS—Concluded.

| Year, month, and district. | Number of plants and of stacks, converters, furnaces, or mills. |     | Turns possible in period: Maximum number. | Turns customarily not worked (Saturdays, Sundays, and holidays). |    | Turns customarily worked in period. |                  |    |                               |    | Total pay roll. |             |
|----------------------------|-----------------------------------------------------------------|-----|-------------------------------------------|------------------------------------------------------------------|----|-------------------------------------|------------------|----|-------------------------------|----|-----------------|-------------|
|                            |                                                                 |     |                                           |                                                                  |    | Aggregate number.                   | Actually worked. |    | Per cent not worked owing to— |    |                 |             |
|                            |                                                                 |     |                                           |                                                                  |    |                                     |                  |    |                               |    |                 | Slack work. |
| 1915.                      |                                                                 |     |                                           |                                                                  |    |                                     |                  |    |                               |    |                 |             |
| Apr. Pittsburgh.....       | 10                                                              | 95  | 8,550                                     | 1,900                                                            | 22 | 6,650                               | 4,497            | 68 | 24                            | 8  |                 | \$344,466   |
| G. L. and M. W.            | 5                                                               | 47  | 4,230                                     | 897                                                              | 21 | 3,333                               | 2,678            | 80 | 18                            | 1  |                 | 152,826     |
| Total.....                 | 15                                                              | 142 | 12,780                                    | 2,797                                                            | 22 | 9,983                               | 7,175            | 72 | 22                            | 6  |                 | 497,292     |
| May. Pittsburgh.....       | 10                                                              | 95  | 8,835                                     | 2,375                                                            | 27 | 6,460                               | 4,244            | 66 | 27                            | 8  |                 | 340,188     |
| G. L. and M. W.            | 5                                                               | 47  | 4,371                                     | 1,080                                                            | 25 | 3,291                               | 1,550            | 47 | 35                            | 18 |                 | 89,263      |
| Total.....                 | 15                                                              | 142 | 13,206                                    | 3,455                                                            | 26 | 9,751                               | 5,794            | 59 | 29                            | 11 |                 | 429,451     |
| June. Pittsburgh.....      | 10                                                              | 95  | 8,550                                     | 1,900                                                            | 22 | 6,650                               | 4,501            | 68 | 26                            | 7  |                 | 359,734     |
| G. L. and M. W.            | 5                                                               | 47  | 4,230                                     | 864                                                              | 20 | 3,366                               | 1,734            | 52 | 31                            | 18 |                 | 98,901      |
| Total.....                 | 15                                                              | 142 | 12,780                                    | 2,764                                                            | 22 | 10,016                              | 6,235            | 62 | 27                            | 10 |                 | 458,635     |
| 1914-15:                   |                                                                 |     |                                           |                                                                  |    |                                     |                  |    |                               |    |                 |             |
| Pittsburgh.....            | 10                                                              | 95  | 102,399                                   | 25,052                                                           | 24 | 77,317                              | 48,381           | 63 | 29                            | 8  |                 | 3,963,330   |
| G. L. and M. W.            | 5                                                               | 47  | 50,778                                    | 11,956                                                           | 24 | 38,822                              | 20,647           | 69 | 25                            | 6  |                 | 1,627,012   |
| Total.....                 | 15                                                              | 142 | 153,147                                   | 37,008                                                           | 24 | 116,139                             | 75,028           | 65 | 28                            | 8  |                 | 5,590,342   |

## TIN-PLATE MILLS.

|                       |    |     |        |       |    |       |       |    |    |       |  |           |
|-----------------------|----|-----|--------|-------|----|-------|-------|----|----|-------|--|-----------|
| 1913.                 |    |     |        |       |    |       |       |    |    |       |  |           |
| July. Pittsburgh..... | 6  | 72  | 6,696  | 1,662 | 25 | 5,034 | 4,140 | 82 | 11 | 7     |  | \$290,555 |
| G. L. and M. W.       | 5  | 64  | 5,952  | 1,412 | 24 | 4,540 | 2,278 | 50 | 12 | 38    |  | 139,810   |
| Total.....            | 11 | 136 | 12,648 | 3,074 | 24 | 9,574 | 6,418 | 67 | 11 | 22    |  | 450,365   |
| Aug. Pittsburgh.....  | 6  | 72  | 6,696  | 1,800 | 27 | 4,896 | 4,465 | 91 | 8  | (1)   |  | 319,689   |
| G. L. and M. W.       | 5  | 64  | 5,952  | 1,615 | 27 | 4,337 | 2,377 | 55 | 44 | 1     |  | 102,917   |
| Total.....            | 11 | 136 | 12,648 | 3,415 | 27 | 9,233 | 6,842 | 74 | 25 | 1     |  | 482,606   |
| Sept. Pittsburgh..... | 6  | 72  | 6,480  | 1,572 | 24 | 4,908 | 4,437 | 90 | 9  | (1)   |  | 323,870   |
| G. L. and M. W.       | 5  | 64  | 5,760  | 1,436 | 25 | 4,324 | 3,386 | 78 | 20 | 2     |  | 199,935   |
| Total.....            | 11 | 136 | 12,240 | 3,008 | 25 | 9,232 | 7,823 | 85 | 14 | 1     |  | 523,805   |
| Oct. Pittsburgh.....  | 6  | 72  | 6,696  | 1,440 | 22 | 5,256 | 4,243 | 81 | 19 | ..... |  | 325,547   |
| G. L. and M. W.       | 5  | 64  | 5,952  | 1,280 | 22 | 4,672 | 3,653 | 78 | 20 | 2     |  | 222,959   |
| Total.....            | 11 | 136 | 12,648 | 2,720 | 22 | 9,928 | 7,896 | 80 | 20 | 1     |  | 548,506   |
| Nov. Pittsburgh.....  | 6  | 72  | 6,480  | 1,800 | 28 | 4,680 | 3,271 | 70 | 30 | (1)   |  | 259,864   |
| G. L. and M. W.       | 5  | 64  | 5,760  | 1,621 | 28 | 4,139 | 2,840 | 69 | 27 | 4     |  | 171,001   |
| Total.....            | 11 | 136 | 12,240 | 3,421 | 28 | 8,819 | 6,111 | 69 | 28 | 2     |  | 430,865   |
| Dec. Pittsburgh.....  | 6  | 72  | 6,696  | 1,680 | 25 | 5,016 | 3,246 | 65 | 27 | 8     |  | 268,420   |
| G. L. and M. W.       | 5  | 64  | 5,952  | 1,472 | 25 | 4,480 | 2,613 | 58 | 39 | 3     |  | 163,829   |
| Total.....            | 11 | 136 | 12,648 | 3,152 | 25 | 9,496 | 5,859 | 62 | 33 | 5     |  | 432,249   |
| 1914.                 |    |     |        |       |    |       |       |    |    |       |  |           |
| Jan. Pittsburgh.....  | 6  | 72  | 6,696  | 1,584 | 24 | 5,112 | 4,596 | 90 | 8  | 2     |  | 340,803   |
| G. L. and M. W.       | 5  | 64  | 5,952  | 1,408 | 24 | 4,544 | 2,893 | 64 | 33 | 4     |  | 190,865   |
| Total.....            | 11 | 136 | 12,648 | 2,992 | 24 | 9,656 | 7,489 | 78 | 19 | 3     |  | 531,668   |
| Feb. Pittsburgh.....  | 6  | 72  | 6,048  | 1,440 | 24 | 4,608 | 4,375 | 95 | 5  | (1)   |  | 340,086   |
| G. L. and M. W.       | 5  | 64  | 5,376  | 1,280 | 24 | 4,096 | 3,028 | 74 | 23 | 3     |  | 194,846   |
| Total.....            | 11 | 136 | 11,424 | 2,720 | 24 | 8,704 | 7,403 | 85 | 13 | 2     |  | 534,932   |

<sup>1</sup> Less than one-half of 1 per cent.

TABLE 10.—TURNS POSSIBLE, TURNS WORKED, AND TOTAL PAY ROLL IN EACH DISTRICT, BY MONTHS, JULY, 1913, TO JUNE, 1915—Continued.

## TIN-PLATE MILLS—Continued.

| Year, month, and district. | Number of plants and of stacks, converters, furnaces, or mills. |        | Turns possible in period: Maximum number. | Turns customarily not worked (Saturdays, Sundays, and holidays). |        | Turns customarily worked in period. |                  |    |                               |       |             | Total pay roll. |
|----------------------------|-----------------------------------------------------------------|--------|-------------------------------------------|------------------------------------------------------------------|--------|-------------------------------------|------------------|----|-------------------------------|-------|-------------|-----------------|
|                            |                                                                 |        |                                           |                                                                  |        | Aggregate number.                   | Actually worked. |    | Per cent not worked owing to— |       |             |                 |
|                            |                                                                 |        |                                           |                                                                  |        |                                     |                  |    |                               |       | Slack work. |                 |
| 1914.                      | Plants.                                                         | Mills. |                                           | No.                                                              | P. ct. | No.                                 | P. ct.           |    |                               |       |             |                 |
| Mar. Pittsburgh.....       | 6                                                               | 72     | 6,696                                     | 1,656                                                            | 25     | 5,040                               | 4,768            | 95 | 5                             | (1)   | \$364,025   |                 |
| G. L. and M. W.            | 5                                                               | 64     | 5,952                                     | 1,472                                                            | 25     | 4,480                               | 3,882            | 87 | 13                            | ..... | 253,806     |                 |
| Total.....                 | 11                                                              | 136    | 12,648                                    | 3,128                                                            | 25     | 9,520                               | 8,650            | 91 | 9                             | (1)   | 617,831     |                 |
| Apr. Pittsburgh.....       | 6                                                               | 72     | 6,480                                     | 1,440                                                            | 22     | 5,040                               | 4,536            | 90 | 10                            | (1)   | 347,244     |                 |
| G. L. and M. W.            | 5                                                               | 64     | 5,760                                     | 1,280                                                            | 22     | 4,480                               | 3,767            | 84 | 16                            | ..... | 244,355     |                 |
| Total.....                 | 11                                                              | 136    | 12,240                                    | 2,720                                                            | 22     | 9,520                               | 8,303            | 87 | 13                            | (1)   | 591,599     |                 |
| May. Pittsburgh.....       | 6                                                               | 72     | 6,696                                     | 1,800                                                            | 27     | 4,896                               | 4,303            | 89 | 11                            | ..... | 324,356     |                 |
| G. L. and M. W.            | 5                                                               | 64     | 5,952                                     | 1,600                                                            | 27     | 4,352                               | 3,553            | 82 | 15                            | 4     | 223,153     |                 |
| Total.....                 | 11                                                              | 136    | 12,648                                    | 3,400                                                            | 27     | 9,248                               | 7,916            | 86 | 13                            | 2     | 550,509     |                 |
| June. Pittsburgh.....      | 6                                                               | 72     | 6,480                                     | 1,440                                                            | 22     | 5,040                               | 4,535            | 90 | 10                            | (1)   | 325,130     |                 |
| G. L. and M. W.            | 5                                                               | 64     | 5,760                                     | 1,280                                                            | 22     | 4,480                               | 3,738            | 83 | 14                            | 2     | 216,858     |                 |
| Total.....                 | 11                                                              | 136    | 12,240                                    | 2,720                                                            | 22     | 9,520                               | 8,273            | 87 | 12                            | 1     | 541,988     |                 |
| 1913-14.                   |                                                                 |        |                                           |                                                                  |        |                                     |                  |    |                               |       |             |                 |
| Pittsburgh.....            | 6                                                               | 72     | 78,840                                    | 19,314                                                           | 24     | 59,526                              | 50,975           | 86 | 13                            | 2     | 3,829,589   |                 |
| G. L. and M. W.            | 5                                                               | 64     | 70,080                                    | 17,156                                                           | 24     | 52,924                              | 38,008           | 72 | 25                            | 3     | 2,407,334   |                 |
| Total.....                 | 11                                                              | 136    | 148,920                                   | 36,470                                                           | 24     | 112,450                             | 88,983           | 79 | 18                            | 2     | 6,236,923   |                 |
| 1914.                      |                                                                 |        |                                           |                                                                  |        |                                     |                  |    |                               |       |             |                 |
| July. Pittsburgh.....      | 6                                                               | 72     | 6,696                                     | 1,589                                                            | 24     | 5,116                               | 3,932            | 77 | 7                             | 16    | 286,852     |                 |
| G. L. and M. W.            | 5                                                               | 64     | 5,952                                     | 1,305                                                            | 23     | 4,587                               | 2,271            | 50 | 3                             | 48    | 148,218     |                 |
| Total.....                 | 11                                                              | 136    | 12,648                                    | 2,945                                                            | 23     | 9,703                               | 6,203            | 64 | 5                             | 31    | 435,070     |                 |
| Aug. Pittsburgh.....       | 6                                                               | 72     | 6,696                                     | 1,800                                                            | 27     | 4,896                               | 4,128            | 84 | 12                            | 3     | 296,754     |                 |
| G. L. and M. W.            | 5                                                               | 64     | 5,952                                     | 1,615                                                            | 27     | 4,337                               | 2,649            | 61 | 19                            | 19    | 164,853     |                 |
| Total.....                 | 11                                                              | 136    | 12,648                                    | 3,415                                                            | 27     | 9,233                               | 6,777            | 73 | 16                            | 11    | 461,607     |                 |
| Sept. Pittsburgh.....      | 6                                                               | 72     | 6,480                                     | 1,662                                                            | 26     | 4,818                               | 4,290            | 89 | 7                             | 4     | 315,896     |                 |
| G. L. and M. W.            | 5                                                               | 64     | 5,760                                     | 1,373                                                            | 24     | 4,387                               | 3,662            | 83 | 4                             | 13    | 216,444     |                 |
| Total.....                 | 11                                                              | 136    | 12,240                                    | 3,035                                                            | 25     | 9,205                               | 7,952            | 86 | 5                             | 8     | 532,340     |                 |
| Oct. Pittsburgh.....       | 6                                                               | 72     | 6,696                                     | 1,584                                                            | 24     | 5,112                               | 3,798            | 74 | 24                            | 2     | 292,218     |                 |
| G. L. and M. W.            | 5                                                               | 64     | 5,952                                     | 1,408                                                            | 24     | 4,544                               | 2,567            | 56 | 44                            | ..... | 135,130     |                 |
| Total.....                 | 11                                                              | 136    | 12,648                                    | 2,992                                                            | 24     | 9,656                               | 6,365            | 66 | 33                            | 1     | 427,348     |                 |
| Nov. Pittsburgh.....       | 6                                                               | 72     | 6,480                                     | 1,722                                                            | 27     | 4,758                               | 2,326            | 49 | 50                            | 1     | 185,965     |                 |
| G. L. and M. W.            | 5                                                               | 64     | 5,760                                     | 1,472                                                            | 26     | 4,288                               | 1,922            | 45 | 55                            | 1     | 106,924     |                 |
| Total.....                 | 11                                                              | 136    | 12,240                                    | 3,194                                                            | 26     | 9,046                               | 4,248            | 47 | 52                            | 1     | 292,889     |                 |
| Dec. Pittsburgh.....       | 6                                                               | 72     | 6,696                                     | 1,648                                                            | 35     | 5,048                               | 2,724            | 54 | 29                            | 17    | 209,506     |                 |
| G. L. and M. W.            | 5                                                               | 64     | 5,952                                     | 1,481                                                            | 25     | 4,471                               | 1,807            | 40 | 54                            | 5     | 101,920     |                 |
| Total.....                 | 11                                                              | 136    | 12,648                                    | 3,129                                                            | 25     | 9,519                               | 4,531            | 48 | 41                            | 12    | 311,426     |                 |
| 1915.                      |                                                                 |        |                                           |                                                                  |        |                                     |                  |    |                               |       |             |                 |
| Jan. Pittsburgh.....       | 6                                                               | 72     | 6,696                                     | 1,800                                                            | 27     | 4,896                               | 3,763            | 77 | 19                            | 5     | 276,084     |                 |
| G. L. and M. W.            | 5                                                               | 64     | 5,952                                     | 1,600                                                            | 27     | 4,352                               | 2,482            | 57 | 43                            | (1)   | 151,991     |                 |
| Total.....                 | 11                                                              | 136    | 12,648                                    | 3,400                                                            | 27     | 9,248                               | 6,245            | 68 | 30                            | 2     | 428,075     |                 |
| Feb. Pittsburgh.....       | 6                                                               | 72     | 6,048                                     | 1,440                                                            | 24     | 4,608                               | 4,156            | 90 | 4                             | 6     | 309,868     |                 |
| G. L. and M. W.            | 5                                                               | 64     | 5,376                                     | 1,280                                                            | 24     | 4,096                               | 2,692            | 66 | 30                            | 4     | 175,076     |                 |
| Total.....                 | 11                                                              | 136    | 11,424                                    | 2,720                                                            | 24     | 8,704                               | 6,848            | 79 | 16                            | 5     | 484,944     |                 |

¹ Less than one-half of 1 per cent.

TABLE 10.—TURNS POSSIBLE, TURNS WORKED, AND TOTAL PAY ROLL IN EACH DISTRICT, BY MONTHS, JULY, 1913, TO JUNE, 1915—Concluded.

## TIN-PLATE MILLS—Concluded.

| Year, month, and district. | Number of plants and of stacks, converters, furnaces, or mills. |                | Turns possible in period: Maximum number. | Turns customarily not worked (Saturdays, Sundays, and holidays). |               | Turns customarily worked in period. |                  |                               |                   |    | Total pay roll. |
|----------------------------|-----------------------------------------------------------------|----------------|-------------------------------------------|------------------------------------------------------------------|---------------|-------------------------------------|------------------|-------------------------------|-------------------|----|-----------------|
|                            |                                                                 |                |                                           |                                                                  |               | Aggregate number.                   | Actually worked. | Per cent not worked owing to— |                   |    |                 |
|                            |                                                                 |                |                                           |                                                                  |               |                                     |                  | Slack work.                   | All other causes. |    |                 |
| 1915.                      |                                                                 | <i>Plants.</i> | <i>Mills.</i>                             | <i>No.</i>                                                       | <i>P. ct.</i> | <i>No.</i>                          | <i>P. ct.</i>    |                               |                   |    |                 |
| Mar. Pittsburgh.....       | 6                                                               | 72             | 6,696                                     | 1,440                                                            | 22            | 5,256                               | 4,164            | 79                            | 16                | 5  | \$313,588       |
| G. L. and M. W.            | 5                                                               | 64             | 5,952                                     | 1,280                                                            | 22            | 4,672                               | 3,304            | 71                            | 20                | 10 | 208,627         |
| Total.....                 | 11                                                              | 136            | 12,648                                    | 2,720                                                            | 22            | 9,928                               | 7,468            | 75                            | 18                | 7  | 522,215         |
| Apr. Pittsburgh.....       | 6                                                               | 72             | 6,480                                     | 1,440                                                            | 22            | 5,040                               | 4,338            | 86                            | 9                 | 5  | 310,686         |
| G. L. and M. W.            | 5                                                               | 63             | 5,703                                     | 1,265                                                            | 22            | 4,438                               | 3,731            | 84                            | 3                 | 13 | 226,244         |
| Total.....                 | 11                                                              | 135            | 12,183                                    | 2,705                                                            | 22            | 9,478                               | 8,069            | 85                            | 6                 | 9  | 536,930         |
| May. Pittsburgh.....       | 6                                                               | 72             | 6,696                                     | 1,866                                                            | 28            | 4,830                               | 3,975            | 82                            | 12                | 6  | 290,949         |
| G. L. and M. W.            | 5                                                               | 63             | 5,859                                     | 1,550                                                            | 26            | 4,309                               | 3,349            | 78                            | 9                 | 14 | 207,123         |
| Total.....                 | 11                                                              | 135            | 12,555                                    | 3,416                                                            | 27            | 9,139                               | 7,324            | 80                            | 10                | 10 | 498,072         |
| June. Pittsburgh.....      | 6                                                               | 72             | 6,480                                     | 1,448                                                            | 22            | 5,032                               | 4,311            | 86                            | 9                 | 5  | 301,035         |
| G. L. and M. W.            | 5                                                               | 63             | 5,670                                     | 1,240                                                            | 22            | 4,430                               | 3,369            | 76                            | 6                 | 18 | 203,570         |
| Total.....                 | 11                                                              | 135            | 12,150                                    | 2,688                                                            | 22            | 9,462                               | 7,680            | 81                            | 8                 | 11 | 504,606         |
| 1914-15.                   |                                                                 |                |                                           |                                                                  |               |                                     |                  |                               |                   |    |                 |
| Pittsburgh.....            | 6                                                               | 72             | 78,840                                    | 19,430                                                           | 25            | 59,410                              | 45,905           | 77                            | 16                | 6  | 3,389,402       |
| G. L. and M. W.            | 5                                                               | 63             | 69,840                                    | 16,929                                                           | 24            | 52,911                              | 33,805           | 64                            | 24                | 12 | 2,046,120       |
| Total.....                 | 11                                                              | 135            | 148,680                                   | 36,359                                                           | 24            | 112,321                             | 79,710           | 71                            | 20                | 9  | 5,435,522       |

<sup>1</sup> 64 mills prior to Apr. 12.<sup>2</sup> 136 mills prior to Apr. 12

## SCOPE AND METHOD.

The number of plants and the number of employees for which data are shown in this report are specified for each year, by departments, in Table 11. The great increase in the number of employees shown in the 1914-1915 group in each department, as illustrated by the total number in all departments in 1915—48,140, or nearly double the number for 1914 in the 1913-1914 group—is due in part to the greater number of plants reported (227 as compared with 165) but mainly to the fact that for 1914 and 1915, in addition to the principal productive occupations which alone were reported in previous years, all other occupations except salaried men, clerks, and foremen are included, grouped as "Unclassified." These unclassified occupations are tabulated in two groups: Productive and non-productive.

Employees in productive occupations are those whose services are directly required in the production of iron and steel. Employees in nonproductive occupations are those whose services are not directly required in production, but whose employment is necessary to secure successful operation and to provide for the maintenance of the equip-

ment in the various producing departments. In the latter group are included that part of the power, mechanical, and yard force chargeable to each department. The number of employees engaged in the principal productive occupations who are represented in this report for 1915 is 32,517, and the number in unclassified occupations is 15,623, a total of 48,140. This number would have been 24 per cent greater (59,752—see Table 9) had every plant reported been working its entire equipment, for each department reported, on full time.

TABLE 11.—NUMBER OF PLANTS AND NUMBER OF EMPLOYEES INCLUDED IN THIS REPORT, BY DEPARTMENTS, 1907 TO 1915.

[The figures for each group of years are for identical plants.]

| Blast furnaces.             |       |                      | Bessemer converters.        |       |                      | Bar mills.                  |       |                      | Open-hearth furnaces.       |       |                      |
|-----------------------------|-------|----------------------|-----------------------------|-------|----------------------|-----------------------------|-------|----------------------|-----------------------------|-------|----------------------|
| Number of identical plants. | Year. | Number of employees. | Number of identical plants. | Year. | Number of employees. | Number of identical plants. | Year. | Number of employees. | Number of identical plants. | Year. | Number of employees. |
| 20                          | 1907  | 4,278                | 9                           | 1907  | 1,757                | 15                          | 1907  | 2,378                | 17                          | 1910  | 3,341                |
|                             | 1908  | 3,028                |                             | 1908  | 1,179                |                             | 1908  | 2,216                |                             | 1911  | 3,065                |
|                             | 1909  | 4,104                |                             | 1909  | 1,352                |                             | 1909  | 2,315                |                             | 1911  | 3,073                |
|                             | 1910  | 4,381                |                             | 1910  | 1,649                |                             | 1910  | 2,560                |                             | 1912  | 3,182                |
| 34                          | 1910  | 7,050                | 10                          | 1910  | 1,730                | 25                          | 1910  | 4,092                | 17                          | 1912  | 3,246                |
|                             | 1911  | 5,268                |                             | 1911  | 1,342                |                             | 1911  | 3,707                |                             | 1913  | 3,498                |
| 35                          | 1911  | 5,336                | 10                          | 1911  | 1,350                | 26                          | 1911  | 3,924                | 17                          | 1913  | 3,244                |
|                             | 1912  | 5,973                |                             | 1912  | 1,460                |                             | 1912  | 4,050                |                             | 1914  | 2,953                |
| 36                          | 1912  | 6,101                | 10                          | 1912  | 1,494                | 26                          | 1912  | 4,114                | 22                          | 1914  | 5,415                |
|                             | 1913  | 6,589                |                             | 1913  | 1,661                |                             | 1913  | 4,320                |                             | 1915  | 5,423                |
| 35                          | 1913  | 6,636                | 10                          | 1913  | 1,339                | 44                          | 1913  | 5,841                |                             |       |                      |
|                             | 1914  | 5,246                |                             | 1914  | 1,067                |                             | 1914  | 5,461                |                             |       |                      |
| 38                          | 1914  | 9,253                | 12                          | 1914  | 2,267                | 57                          | 1914  | 8,802                |                             |       |                      |
|                             | 1915  | 8,563                |                             | 1915  | 2,218                |                             | 1915  | 8,732                |                             |       |                      |

  

| Pudding mills.              |       |                      | Blooming mills.             |       |                      | Plate mills.                |       |                      | Standard rail mills.        |       |                      |
|-----------------------------|-------|----------------------|-----------------------------|-------|----------------------|-----------------------------|-------|----------------------|-----------------------------|-------|----------------------|
| Number of identical plants. | Year. | Number of employees. | Number of identical plants. | Year. | Number of employees. | Number of identical plants. | Year. | Number of employees. | Number of identical plants. | Year. | Number of employees. |
| 29                          | 1914  | 4,606                | 19                          | 1910  | 1,064                | 11                          | 1910  | 1,330                | 6                           | 1910  | 1,535                |
|                             | 1915  | 4,472                |                             | 1911  | 948                  |                             | 1911  | 1,203                |                             | 1911  | 1,252                |
|                             |       |                      | 19                          | 1912  | 988                  | 11                          | 1912  | 1,203                | 7                           | 1911  | 1,355                |
|                             |       |                      |                             | 1912  | 975                  |                             | 1912  | 1,248                |                             | 1912  | 1,457                |
|                             |       |                      | 19                          | 1913  | 998                  | 11                          | 1913  | 1,256                | 7                           | 1912  | 1,435                |
|                             |       |                      |                             | 1913  | 1,019                |                             | 1913  | 1,167                |                             | 1913  | 1,427                |
|                             |       |                      | 23                          | 1914  | 892                  | 13                          | 1914  | 1,046                | 6                           | 1913  | 1,137                |
|                             |       |                      |                             | 1914  | 2,476                |                             | 1914  | 2,301                |                             | 1914  | 943                  |
|                             |       |                      |                             | 1915  | 2,659                |                             | 1915  | 2,245                | 7                           | 1914  | 1,725                |
|                             |       |                      |                             |       |                      |                             |       |                      |                             | 1915  | 1,945                |

TABLE 11.—NUMBER OF PLANTS AND NUMBER OF EMPLOYEES INCLUDED IN THIS REPORT, BY DEPARTMENTS, 1907 TO 1915—Concluded.

| Sheet mills.                                |       |                                   | Tin-plate mills.                            |       |                                   | Total.                                      |       |                                   |  |  |  |
|---------------------------------------------|-------|-----------------------------------|---------------------------------------------|-------|-----------------------------------|---------------------------------------------|-------|-----------------------------------|--|--|--|
| Num-<br>ber of<br>identi-<br>cal<br>plants. | Year. | Num-<br>ber of<br>em-<br>ployees. | Num-<br>ber of<br>identi-<br>cal<br>plants. | Year. | Num-<br>ber of<br>em-<br>ployees. | Num-<br>ber of<br>identi-<br>cal<br>plants. | Year. | Num-<br>ber of<br>em-<br>ployees. |  |  |  |
| 9                                           | 1910  | 2,346                             | 5                                           | 1910  | 2,149                             | 44                                          | 1907  | 8,413                             |  |  |  |
|                                             | 1911  | 2,772                             |                                             | 1911  | 2,310                             |                                             | 1908  | 6,423                             |  |  |  |
| 9                                           | 1911  | 2,781                             | 6                                           | 1911  | 2,487                             |                                             | 1909  | 7,771                             |  |  |  |
|                                             | 1912  | 2,716                             |                                             | 1912  | 2,694                             |                                             | 1910  | 8,590                             |  |  |  |
| 8                                           | 1912  | 2,439                             | 6                                           | 1912  | 2,739                             | 136                                         | 1910  | 21,637                            |  |  |  |
|                                             | 1913  | 2,487                             |                                             | 1913  | 2,778                             |                                             | 1911  | 21,867                            |  |  |  |
| 13                                          | 1913  | 3,545                             | 10                                          | 1913  | 4,625                             | 140                                         | 1911  | 22,457                            |  |  |  |
|                                             | 1914  | 3,446                             |                                             | 1914  | 4,396                             |                                             | 1912  | 23,723                            |  |  |  |
| 15                                          | 1914  | 6,304                             | 11                                          | 1914  | 6,033                             | 140                                         | 1912  | 23,791                            |  |  |  |
|                                             | 1915  | 5,736                             |                                             | 1915  | 6,147                             |                                             | 1913  | 25,014                            |  |  |  |
|                                             |       |                                   |                                             |       |                                   | 165                                         | 1913  | 28,553                            |  |  |  |
|                                             |       |                                   |                                             |       |                                   | 227                                         | 1914  | 25,450                            |  |  |  |
|                                             |       |                                   |                                             |       |                                   |                                             | 1914  | 49,182                            |  |  |  |
|                                             |       |                                   |                                             |       |                                   |                                             | 1915  | 48,140                            |  |  |  |

Reports from 20 identical blast furnaces, in Table 11, above, were obtained for the period 1907 to 1910. These same 20 plants furnished data for the years 1911 and 1912, and 14 additional plants reported data for the years 1910, 1911, and 1912, thereby making comparable data available for 34 plants for 1910 and 1911. Another plant was included for 1911 and 1912, making comparable figures available for those two years from 35 plants; and for 1912 and 1913 still another plant was included, making 36 blast-furnace plants for these two years. One plant was out of blast in 1914 and 1915, and 5 other plants were likewise "down" in 1915; but 8 additional plants were included in the report with data for both 1914 and 1915; thus there are 35 identical plants with comparable data for 1913 and 1914, and 38 plants for 1914 and 1915. Comparable data were obtained for 4,278 blast-furnace employees in 1907 and 4,381 employees in 1910; for 7,050 in 1910 and 5,268 in 1911; for 5,336 in 1911 and 5,973 in 1912; for 6,101 in 1912 and 6,589 in 1913; for 6,636 in 1913 and 5,246 in 1914; and for 9,253 in 1914 and 8,563 in 1915. The figures for other departments may be explained in a similar manner.

The figures for 1910, published in this report, are a part of the data included in the report on Conditions of Employment in the Iron and Steel Industry, made by this bureau and published as Senate Document No. 110, Sixty-second Congress, first session. These figures for 1910 were collected in the fall of that year. The collection of data for the other years, from 1907 to 1912, was begun in the fall of 1912, complete reports for all years having been obtained at one time, and plants not continuously in operation from the time of starting until 1912 having been omitted.

The collection of data for the year 1913 was begun in the summer of that year, and to keep a fair representation it was necessary, in some instances, to report new plants in place of those which for one reason or another were temporarily or permanently not in operation. In such added plants comparable data for 1912 were obtained together with data for 1913.

Reports for 1914 and 1915 were obtained during those years, and owing to the dull period prevailing in this industry a number of plants previously reported in the several departments were not in operation and other plants were substituted for them. Puddling mills were added to the report in these two years and many new plants in other departments, noticeably in the bar-mill department, were also reported.

Data for establishments were not included in this report unless information for at least two consecutive years was available. Direct comparisons of data for two or more successive years can be made properly only when the plants furnishing the data are identical, and the word is here used in the strictest sense. By identical plants is meant not only identical establishments of identical companies but also identical units or departments—as, for example, separate bar mills or groups of open-hearth furnaces. Frequently in this report the number of plants remains unchanged from year to year while the plants are not identical—one plant may have been shut down and another substituted, or when there was no change in the plants themselves it may have been impossible in one plant to obtain reports for one occupation in one year, or an establishment reporting several bar mills, for example, may have ceased operating one, or have added a new one. As in nearly every instance substituted plants were located in the immediate vicinity of those omitted, it frequently happens that the new data correspond very closely to the old, and the two reports for one year are, therefore, in such cases nearly the same.

In some instances an occupation as tabulated embraces two or more subclasses of employees (for example, see Glossary, p. 493, for description of shear-men's helpers in blooming mills) and for some reason it may have been impossible to secure reports for one year for one class. In such a case, while the number of plants for the occupation remains unchanged, the plants in the two years are not considered identical and two reports are made for the connecting year, one comparable with the previous year when all classes making up the occupation were represented, and another comparable with the succeeding year when one class was omitted.

Information was secured from plants located in 14 States. To make the groups of data of sufficient volume to be of representative

value, the several plants covered have been divided into four districts only. These districts were not established strictly on geographical lines, but rather on account of similar industrial conditions. The "Eastern" district covers the northeastern part of the United States as far west as central New York and central Pennsylvania, and including Maryland. The "Pittsburgh" district includes not only the plants in Pittsburgh proper but also those in western Pennsylvania, those along the border line in Ohio from Youngstown south to Bellaire, and the plants which are located in the "Panhandle" of West Virginia. The "Great Lakes and Middle West" district includes plants scattered along the Great Lakes from western New York to Illinois and Wisconsin, and also some plants in inland districts, including Colorado. Although this is a very large territory geographically, it is essentially a unit industrially (so far as the iron and steel industry is concerned), the wage rates of the entire district being based largely on those paid in the two producing centers, Buffalo and Chicago. The "Southern" district includes the establishments in Virginia, Tennessee, Georgia, Alabama, Kentucky, and in the southern part of Ohio. The southern Ohio plants are included with the Southern district because the conditions both as to wages paid and the general class of labor employed resemble much more closely the conditions of the Alabama and Kentucky plants than they do those of the other plants of Ohio. The plants included in the report are representative of the industry, and a fair apportionment is given to the several districts.

#### **PROPORTION OF TOTAL IRON AND STEEL EQUIPMENT OF THE UNITED STATES INCLUDED IN THIS REPORT.**

In Table 12 is given for each department and district the number of plants, the total number of units represented, and the tonnage capacity, first, of all plants in the United States, as listed in the Iron and Steel Works Directory of the United States, published by the American Iron and Steel Institute in 1916, and second, of the plants included in this report for 1915. The proportion of the total plants, units, and tonnage capacity embraced by the plants herein covered is indicated by percentages.

The "Total" columns relating to the directory cover not only the four districts specified, but the Pacific coast district also, making it a total for the United States. Additional columns of the table show the number of employees in 1915 in each district and department. The number of employees in plants not covered is of course not available.

TABLE 12.—NUMBER OF PLANTS, TOTAL NUMBER OF UNITS REPRESENTED, AND COVERED BY THIS REPORT, FOR

| Line No. | Department.                                       | Eastern district. |                                 |            |                  | Pittsburgh district. |                                 |            |                  |
|----------|---------------------------------------------------|-------------------|---------------------------------|------------|------------------|----------------------|---------------------------------|------------|------------------|
|          |                                                   | Number of—        |                                 |            | Capacity (tons). | Number of—           |                                 |            | Capacity (tons). |
|          |                                                   | Plants.           | Furnaces, converters, or mills. | Employees. |                  | Plants.              | Furnaces, converters, or mills. | Employees. |                  |
|          | Blast furnaces:                                   |                   |                                 |            |                  |                      |                                 |            |                  |
| 1        | Directory—1916.....                               | 35                | 64                              | .....      | 5,592,000        | 50                   | 128                             | .....      | 18,448,000       |
| 2        | This report—1915.....                             | 6                 | 15                              | 794        | 1,882,000        | 10                   | 48                              | 3,176      | 7,928,000        |
| 3        | Per cent.....                                     | 17                | 23                              | .....      | 34               | 20                   | 38                              | .....      | 43               |
|          | Bessemer converters:                              |                   |                                 |            |                  |                      |                                 |            |                  |
| 4        | Directory—1916.....                               | 1                 | 3                               | .....      | 440,000          | 12                   | 32                              | .....      | 7,796,000        |
| 5        | This report—1915.....                             | .....             | .....                           | .....      | .....            | 7                    | 19                              | 1,463      | 4,981,000        |
| 6        | Per cent.....                                     | .....             | .....                           | .....      | .....            | 58                   | 59                              | .....      | 64               |
|          | Open-hearth furnaces:                             |                   |                                 |            |                  |                      |                                 |            |                  |
| 7        | Directory—1916.....                               | 26                | 152                             | .....      | 4,646,000        | 32                   | 334                             | .....      | 13,458,500       |
| 8        | This report—1915.....                             | 6                 | 47                              | 1,116      | 1,762,000        | 6                    | 89                              | 2,013      | 3,558,000        |
| 9        | Per cent.....                                     | 23                | 31                              | .....      | 38               | 19                   | 27                              | .....      | 26               |
|          | Puddling mills:                                   |                   |                                 |            |                  |                      |                                 |            |                  |
| 10       | Directory—1916.....                               | 36                | 865                             | .....      | 628,700          | 15                   | 539                             | .....      | 344,000          |
| 11       | This report—1915.....                             | 9                 | 287                             | 1,506      | 244,000          | 7                    | 298                             | 1,640      | 215,000          |
| 12       | Per cent.....                                     | 25                | 33                              | .....      | 39               | 47                   | 55                              | .....      | 63               |
|          | Blooming mills:                                   |                   |                                 |            |                  |                      |                                 |            |                  |
| 13       | Directory—1916.....                               | 17                | 22                              | .....      | 4,298,000        | 30                   | 43                              | .....      | 14,360,500       |
| 14       | This report—1915.....                             | 3                 | 3                               | 239        | 895,000          | 10                   | 12                              | 1,364      | 5,113,000        |
| 15       | Per cent.....                                     | 18                | 14                              | .....      | 21               | 33                   | 28                              | .....      | 36               |
|          | Plate mills:                                      |                   |                                 |            |                  |                      |                                 |            |                  |
| 16       | Directory—1916.....                               | 8                 | 23                              | .....      | 1,099,000        | 16                   | 27                              | .....      | 2,568,000        |
| 17       | This report—1915.....                             | 3                 | 7                               | 699        | 355,000          | 6                    | 9                               | 1,121      | 885,000          |
| 18       | Per cent.....                                     | 28                | 34                              | .....      | 32               | 38                   | 33                              | .....      | 34               |
|          | Standard rail mills:                              |                   |                                 |            |                  |                      |                                 |            |                  |
| 19       | Directory—1916.....                               | 3                 | 4                               | .....      | 1,560,000        | 3                    | 5                               | .....      | 2,250,000        |
| 20       | This report—1915.....                             | 2                 | 2                               | 481        | 800,000          | 2                    | 2                               | 656        | 1,400,000        |
| 21       | Per cent.....                                     | 67                | 50                              | .....      | 51               | 67                   | 40                              | .....      | 62               |
|          | Bar mills:                                        |                   |                                 |            |                  |                      |                                 |            |                  |
| 22       | Directory—1916.....                               | 62                | 191                             | .....      | .....            | 42                   | 181                             | .....      | .....            |
| 23       | This report—1915.....                             | 15                | 33                              | 1,876      | .....            | 14                   | 41                              | 3,366      | .....            |
| 24       | Per cent.....                                     | 24                | 17                              | .....      | .....            | 33                   | 23                              | .....      | .....            |
|          | Sheet mills:                                      |                   |                                 |            |                  |                      |                                 |            |                  |
| 25       | Directory—1916.....                               | 1                 | 4                               | .....      | 10,000           | 23                   | 239                             | .....      | 1,247,400        |
| 26       | This report—1915.....                             | .....             | .....                           | .....      | .....            | 10                   | 95                              | 3,808      | 512,700          |
| 27       | Per cent.....                                     | .....             | .....                           | .....      | .....            | 43                   | 40                              | .....      | 41               |
|          | Tin-plate mills:                                  |                   |                                 |            |                  |                      |                                 |            |                  |
| 28       | Directory—1916.....                               | .....             | .....                           | .....      | .....            | 23                   | 342                             | .....      | 1,296,250        |
| 29       | This report—1915.....                             | .....             | .....                           | .....      | .....            | 6                    | 72                              | 3,485      | 370,050          |
| 30       | Per cent.....                                     | .....             | .....                           | .....      | .....            | 26                   | 21                              | .....      | 29               |
| 31       | Total number of employees covered in this report. | .....             | .....                           | 6,711      | .....            | .....                | .....                           | 22,092     | .....            |



TOTAL TONNAGE CAPACITY IN THE UNITED STATES, AND THE EXTENT TO WHICH EACH DISTRICT, BY DEPARTMENTS.

| Great Lakes and Middle West district. |                                 |                |                  | Southern district. |                                 |                |                  | Total.     |                                 |                |                  | Line No. |
|---------------------------------------|---------------------------------|----------------|------------------|--------------------|---------------------------------|----------------|------------------|------------|---------------------------------|----------------|------------------|----------|
| Number of—                            |                                 |                | Capacity (tons). | Number of—         |                                 |                | Capacity (tons). | Number of— |                                 |                | Capacity (tons). |          |
| Plants.                               | Furnaces, converters, or mills. | Em- ploy- ees. |                  | Plants.            | Furnaces, converters, or mills. | Em- ploy- ees. |                  | Plants.    | Furnaces, converters, or mills. | Em- ploy- ees. |                  |          |
| 31                                    | 92                              |                | 12,528,725       | 54                 | 86                              |                | 5,812,100        | 170        | 370                             |                | 42,380,825       | 1        |
| 11                                    | 47                              | 2,761          | 6,995,025        | 11                 | 23                              | 1,832          | 2,198,100        | 38         | 133                             | 8,563          | 19,003,125       | 2        |
| 35                                    | 51                              |                | 56               | 20                 | 27                              |                | 38               | 22         | 36                              |                | 45               | 3        |
| 8                                     | 20                              |                | 4,977,000        | 1                  | 2                               |                | 180,000          | 22         | 57                              |                | 13,393,000       | 4        |
| 5                                     | 13                              | 755            | 3,503,000        |                    |                                 |                |                  | 12         | 32                              | 2,218          | 8,484,000        | 5        |
| 63                                    | 67                              |                | 70               |                    |                                 |                |                  | 55         | 56                              |                | 63               | 6        |
| 20                                    | 186                             |                | 7,994,000        | 5                  | 30                              |                | 1,483,000        | 87         | 709                             |                | 27,701,500       | 7        |
| 7                                     | 73                              | 1,755          | 3,206,000        | 3                  | 20                              | 539            | 1,168,000        | 22         | 229                             | 5,423          | 9,694,000        | 8        |
| 35                                    | 39                              |                | 40               | 60                 | 67                              |                | 79               | 25         | 32                              |                | 35               | 9        |
| 14                                    | 162                             |                | 364,000          | 7                  | 115                             |                | 91,000           | 72         | 1,681                           |                | 1,427,700        | 10       |
| 8                                     | 93                              | 850            | 189,000          | 5                  | 76                              | 476            | 48,000           | 29         | 754                             | 4,472          | 696,000          | 11       |
| 57                                    | 57                              |                | 52               | 71                 | 66                              |                | 53               | 40         | 45                              |                | 49               | 12       |
| 17                                    | 27                              |                | 9,385,000        | 6                  | 6                               |                | 1,310,000        | 70         | 98                              |                | 29,353,000       | 13       |
| 7                                     | 10                              | 792            | 3,995,000        | 3                  | 3                               | 264            | 820,000          | 23         | 28                              | 2,659          | 10,823,000       | 14       |
| 41                                    | 37                              |                | 43               | 50                 | 50                              |                | 63               | 33         | 29                              |                | 37               | 15       |
| 6                                     | 11                              |                | 1,140,000        | 1                  | 1                               |                | 20,000           | 31         | 62                              |                | 4,827,000        | 16       |
| 4                                     | 4                               | 425            | 570,000          |                    |                                 |                |                  | 13         | 20                              | 2,245          | 1,810,000        | 17       |
| 67                                    | 36                              |                | 50               |                    |                                 |                |                  | 42         | 32                              |                | 37               | 18       |
| 5                                     | 5                               |                | 2,370,000        | 1                  | 1                               |                | 380,000          | 12         | 15                              |                | 6,560,000        | 19       |
| 3                                     | 3                               | 808            | 1,110,000        |                    |                                 |                |                  | 7          | 7                               | 1,945          | 3,310,000        | 20       |
| 60                                    | 60                              |                | 47               |                    |                                 |                |                  | 58         | 47                              |                | 50               | 21       |
| 43                                    | 113                             |                |                  | 19                 | 47                              |                |                  | 173        | 555                             |                |                  | 22       |
| 19                                    | 35                              | 2,484          |                  | 9                  | 19                              | 1,006          |                  | 57         | 128                             | 8,732          |                  | 23       |
| 44                                    | 31                              |                |                  | 47                 | 40                              |                |                  | 33         | 23                              |                |                  | 24       |
| 15                                    | 135                             |                | 705,600          |                    |                                 |                | 127,000          | 42         | 404                             |                | 2,090,000        | 25       |
| 5                                     | 47                              | 1,928          | 290,000          | 3                  | 26                              |                |                  | 15         | 142                             | 5,736          | 802,700          | 26       |
| 33                                    | 35                              |                | 41               |                    |                                 |                |                  | 36         | 35                              |                | 38               | 27       |
| 8                                     | 80                              |                | 313,650          |                    |                                 |                |                  | 31         | 422                             |                | 1,609,900        | 28       |
| 5                                     | 63                              | 2,662          | 226,300          |                    |                                 |                |                  | 11         | 135                             | 6,147          | 596,350          | 29       |
| 63                                    | 79                              |                | 72               |                    |                                 |                |                  | 35         | 32                              |                | 37               | 30       |
|                                       |                                 | 15,220         |                  |                    |                                 | 4,117          |                  |            |                                 | 48,140         |                  | 31       |

It is seen from the table above that in the blast-furnace department this report for 1915 covers 38 of the 170 plants, or 22 per cent, of the blast-furnace plants in the United States, 133 of the 370 stacks, or 36 per cent of the separate stacks, and 19,003,125 of the 42,380,825 tons, or 45 per cent of the tonnage capacity. These 38 plants employed 8,563 men. Sixty-three per cent of the total tonnage capacity of plants in the United States making bessemer-steel ingots is included; 35 per cent of the total tonnage capacity of plants making open-hearth steel ingots; 49 per cent of puddling-mill capacity; 37 per cent of blooming-mill capacity; 37 per cent of plate-mill capacity; 50 per cent of standard-rail-mill capacity; 38 per cent of sheet-mill capacity, and 37 per cent of tin-plate-mill capacity. Figures showing the tonnage capacity of bar mills are not available, but this report covers 33 per cent of the plants and 23 per cent of the separate bar mills in the United States. A total of 48,140 men were employed in 1915 in both productive and nonproductive occupations of the 10 departments covered. This number does not include salaried men, foremen, and clerks.

### EXPLANATION OF THE DATA PRESENTED.

The greater part of the data presented was obtained by personal visits of agents of this bureau to the several plants. A part of the information was obtained from the plants by correspondence, on schedules and under instructions prepared by the bureau. In certain instances agents visited plants that had furnished data by correspondence to harmonize data not clearly expressed on the schedule.

The number of employees shown in the several tables, with the exception of laborers and those employed in certain other unskilled general occupations, represents the number of employees required to man properly the positions in the mill under normal operating conditions and is not the number of employees who might have appeared on the pay rolls during the pay period covered. For example, a certain operation required 4 men, but during the pay-roll period there were times when one of these 4 did not report for duty and the position was filled by a different employee, and during the pay period a total of 6 men covered the 4 positions and appeared on the pay roll. In such instance the number of employees was reported as 4 and not 6.

The data presented are for one pay-roll period in each year—the pay roll for the second half of May, except in the very few plants where abnormal conditions in May made it desirable to take some other period.

The full-time hours of labor per week shown in the tables of the report are the regular hours of work of the several employees under normal conditions in the establishment. The working time is the

time on duty, including intervals of waiting for work; in other words, the time between the hour of reporting for duty and the hour of going off duty.

The working time of employees is not always the working time of their occupation as a whole. Some plants operating seven days per week make provision for laying off each employee one day a week. In such a plant the full-time hours per week of an employee working 12 hours a day is 72 hours. In a plant making no such provision, the full-time hours per week of an employee working 12 hours a day is 84 hours. The full-time hours per week and the relative or index numbers based thereon do not in any way indicate the extent of unemployment. Employees may work overtime, broken time, or be laid off, or a temporary reduction may be made in working hours without such change affecting the full-time hours per week.

The rates of wages per hour appearing in the tables include both the wages of time workers and the earnings of tonnage or pieceworkers. All time rates by the day or week have been reduced to rates per hour. The earnings of tonnage workers, the earnings of employees working at both time and tonnage rates, and the earnings of employees who, in addition to a regular time rate, receive a bonus based on production, also have been reduced to earnings per hour by dividing the earnings by the hours worked. The time workers and tonnage workers of each occupation are combined as one group.

In this connection it should be noted that while in other industries the earnings of employees paid on a piecework basis usually are proportionate to the exertion and skill of the individual employee, in the iron and steel industry the earnings of tonnage workers depend upon the production of an entire department or group of employees.

A change in the earnings per hour of tonnage workers does not of necessity indicate a change in tonnage or piece rates. A change in methods or machinery, a speeding up, or more steady work resulting from a greater volume of business, may increase the hourly earnings or, on the other hand, changes in methods, a slowing down in speed, or a lull in business may reduce hourly earnings. Varying intervals while on duty waiting for work may also affect hourly earnings.

The reports from the plants in most instances showed wages of each individual employee, but in some cases, particularly in the sheet and tin mills, reports gave the aggregate wages of two or more such persons in an occupation instead of wages of each individual. In such plants the classification of wages per hour is made of averages of aggregate wages of the employees, instead of wages of each individual, and hence the classification in the tables of this report for the department as a whole is to a very limited extent a combination of such averages and of individual earnings.

The full-time weekly earnings are the earnings per week of employees working full time, or the earnings on broken time reduced to equivalent earnings for a full week.

In considering weekly earnings it should be remembered that a reduction of hours tends to reduce weekly earnings just as an increase tends to increase them. Thus between 1907 and 1915 it will be observed that in the blast-furnace department the hours for the department were reduced 6 per cent and wages per hour were increased 14 per cent, each tending to offset the other, and making the increase in weekly earnings only 8 per cent. Further, a reduction in the hours of a pieceworker may reduce his earnings in a week and leave his earnings per hour unchanged, while a reduction of hours for a time worker will, if his weekly rate remains the same, increase his rate per hour.

Still another influence on average weekly earnings for the department as a whole must be considered. That is, the changes in the number of employees in the several occupations from year to year. It is obvious that an increase in the number of employees in the lower-paid occupations, or a decrease in the number of those in the higher-paid ones would lower the average rate and earnings for all occupations, just as an increase in the number of employees in the higher-paid occupations or a decrease in the number in the lower-paid ones would increase the average.

#### **METHOD OF COMPUTING AVERAGES.**

The averages of full-time hours per week, rates of wages per hour, and full-time weekly earnings are computed by adding the data for each individual employee and dividing the total by the number of employees.

#### **REASON FOR TAKING 1915 AS BASE YEAR.**

Relative full-time hours of labor, relative rates of wages per hour, and relative full-time weekly earnings are briefly described on pages 14 and 15.

It will be observed that in the tables of relative numbers the data for the latest year available, 1915 in this report, are taken as the base, or 100 per cent. Relative or index numbers are most frequently used to compare the latest year with preceding years, as 1914 with 1915, 1913 with 1915, etc., and a comparison with 100 conveys a clearer idea than a comparison of any two numbers, neither of which is 100. For example, the ratio 96.4:100 is more readily grasped than the equal ratio 137.3:142.4.

Another and more important reason for taking the last year, 1915, as the base, or 100 per cent, is that the data for 1915 are greater in amount and better in quality than for any preceding year. Thus

for blast furnaces data were obtained from 20 plants for 1907 and from 38 plants for 1915. While the average for 20 plants might possibly have been a fairly acceptable base, the average of nearly twice as many plants recently canvassed becomes more nearly representative of the industry, and thus a more satisfactory base. Starting with 1915 and computing the index back year by year to 1907 the weakness, if any, in the data of earlier years can not manifest itself in the relative numbers except in the earlier years. But if the average for 1907 were taken as a base, any weakness beginning in the index of the earlier years would be continued down through the later years, though the basic data for such later years were entirely satisfactory.

#### METHOD OF COMPUTING RELATIVE NUMBERS.

The method of computing the relative numbers is best explained by an illustration. The full-time weekly earnings in 1913, 1914, and 1915 of stockers in the blast-furnace department is taken as an example.

|                                                                                      | Number<br>of<br>identical<br>plants. | Year.   |         |         |
|--------------------------------------------------------------------------------------|--------------------------------------|---------|---------|---------|
|                                                                                      |                                      | 1913    | 1914    | 1915    |
| Full-time weekly earnings.....                                                       | 33                                   | \$15.00 | \$14.19 |         |
|                                                                                      | 35                                   |         | 14.03   | \$13.99 |
| Relative full-time weekly earnings computed therefrom.....                           |                                      | 106     | 100     | 100     |
| Full-time weekly earnings in identical establishments covering the full 3 years..... | 29                                   | 15.12   | 14.31   | 14.47   |
| Relative full-time weekly earnings computed therefrom.....                           |                                      | 104     | 99      | 100     |

Data are available for this occupation from 1907 to 1915, but the figures for 1913 to 1915 only are used, being sufficient to illustrate the method of computing the relative numbers.

The average for 1915 is taken as the base (100), then \$14.03 divided by \$13.99 equals 100 (100.3), the relative for 1914. The ratio of 1913 to 1914 is \$15.00 divided by \$14.19. The relative for 1914 just determined, 100 (100.3), multiplied by \$15.00 divided by \$14.19 equals 106 (105.7), the relative for 1913. In this report the relative number is published without decimals.

This method of computing relative numbers is used because of the change that was made in the number of establishments to get a wider representation in the later years. In computing a series of relative numbers, account must be taken of changes in plants from year to year, as some discontinue operations or cease to be representative and new plants come into operation. Thirty-three plants furnished data for 1913 and 1914, but in 1915 four of these plants were not in operation and six other plants furnished data for both 1915 and 1914, making 35 for that group. These changes reduced the weekly

earnings somewhat, the average in 1914 for 35 plants being \$14.03 as against \$14.19 for 33 plants. With a varying number of plants such differences must be expected.

The average of the weekly earnings for the 35 plants in 1915 was \$13.99. In the 29 plants, running through the full 3-year period, the average earnings in 1915 were \$14.47. Thus the averages for 35 plants show a decrease in earnings from \$14.03 in 1914 to \$13.99 in 1915, while the averages for 29 plants show an increase from \$14.31 in 1914 to \$14.47 in 1915. Relatives have been computed on the data of the 29 plants, and are presented in the table simply to illustrate the difference shown by relatives based on different amounts of data. The relatives based on the greatest amount of available data, being more nearly representative, are presented in the several tables of relative numbers in the report.

A word of caution is given as to the use of relative numbers. The per cent of increase or decrease from one year to another is not the difference between the relative numbers for the two years. Thus, in Table 14, the relative full-time weekly earnings of stockers increased from 95 in 1907 to 106 in 1913, a difference of 11 in the relatives. This difference, 11, is 11.6 per cent of the relative 95, but as decimals are not used in this table this becomes 12 per cent.

The above illustration shows the method of computing the relative numbers for an occupation. Precisely the same method was used in computing the relative numbers for each department as a whole. For example, for each year the full-time weekly earnings of each employee of all occupations covered were added and the sum divided by the total employees covered, giving the average full-time weekly earnings of all employees in the department. From these averages (unpublished) the relative full-time weekly earnings for the industry were computed by the method illustrated above. This explanation applies equally to relative full-time hours of labor and to relative rates of wages per hour.

In Table 10 figures are given concerning the volume of employment in the several departments, monthly, from July, 1913, to June, 1915, and in Table 1 there are presented index numbers computed therefrom. As the method of computation is complex, an explanation is given in the form of an illustration. The tin-plate mill figures are taken as the example.

What constitutes customary turns is explained on page 29. The turns actually worked in July, 1913, were 6,418. The number of customary turns in July, 1913, was 9,574, of which number the turns actually worked (6,418) constituted 67 per cent.

The estimated full customary time pay roll was computed from the actual pay rolls of the turns worked. The customary turns for each of the 24 months were added and the sum (224,771) was divided by

24, giving 9,365 customary turns as the average monthly number for these mills. The actual pay rolls for the 24 months were added and the sum (\$11,672,445) was divided by the sum of the turns actually made in the 24 months (168,693) and the quotient multiplied by the average monthly full number of customary turns (9,365), giving approximately \$648,000 as the estimated full-time monthly pay roll. The actual pay roll in July, 1913, was \$450,365, which number is 70 per cent of \$648,000.

### PREVIOUS REPORTS.

Wages in the iron and steel industry have entered into several reports published by the Bureau of Labor Statistics, among such reports being the Sixth Annual, the Nineteenth Annual, and Bulletins Nos. 59, 65, 71, 77, 151, and 168.

Two Senate documents contain reports of investigations made by the Bureau of Labor Statistics treating in part of wages in the iron and steel industry, namely:

Report on Strike at Bethlehem Steel Works. Senate Document No. 521, Sixty-first Congress, second session.

Report on Conditions of Employment in the Iron and Steel Industry in the United States (4 volumes). Senate Document No. 110, Sixty-second Congress, first session.

The last-named document is a very comprehensive study of the wages, hours of labor, working conditions, etc., in the industry in the year 1910. It covered all occupations in the industry and practically all plants in operation in the United States. The wage data of this report were based mostly on a half-month pay roll, in most instances in the month of May.

The resources of the Bureau of Labor Statistics would not warrant such a large and expensive study to be made each year. This present report contains representative data only, as before stated, but such data cover not only 1910, but all the years from 1907 to 1915, inclusive, in three departments; from 1910 to 1915, in six departments, and 1914 and 1915, in one department.

Figures for each department and each geographical division for years preceding 1914, corresponding to those given in this report for 1913, 1914, and 1915 were given in Bulletins 151 and 168 of this bureau.

Descriptions of the occupations in each department are to be found in the Glossary of Occupations, pages 467 to 526.

## BLAST FURNACES.<sup>1</sup>

### SUMMARY.

The year 1913 marked the highest point in wages per hour and per week in this department in the period 1907 to 1915. Wages per hour fell off 1 per cent in 1914, accompanied by a reduction of 3 per cent in the hours of labor, making a reduction of 4 per cent in the earnings of a full-time week. Both wages and hours of labor remained practically unchanged in 1915 as compared with 1914. The lowest point in wages during the nine-year period was reached in 1909. The figures stated apply to the department as a whole ("All occupations"), but there are some deviations therefrom in the several occupations as is indicated in the table of relative numbers (Table 14).

From 1907 to 1915 there was a steadily exerted effort to reduce the turns (days) per week and therewith the hours per week of individual employees in blast-furnace operation. Some seven-day occupations were reduced to six-day occupations, and many seven-day "turn" occupations made six-day positions, one day out of seven being worked by a relief man.

The most significant facts concerning wages and hours of labor in the several occupations of the blast-furnace department appearing in this report are summarized in the table following. Data are presented for the years 1907 to 1915, the figures for each group of years being for identical plants. The information for 1915 represents 8,563 employees, and was obtained from 38 plants having 133 stacks and capable of producing 45 per cent of the total tonnage capacity of blast furnaces in the United States. Of the 8,563 employees 4,914 are in the 16 principal production occupations specified each year from 1907 to 1915, and the remaining 3,649 are in the unclassified productive and nonproductive groups reported for the years 1914 and 1915 only. In this summary table occupations are grouped according to wages paid, beginning with the lowest-paid group, and the occupations in each group are presented in alphabetical order. Classified full-time hours per week and rates of wages per hour are shown by percentages which were computed from the actual figures given in Table A.

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<sup>1</sup> Summary figures relating to this department are given with figures for other departments of the iron and steel industry on pages 7 to 26; an account of the volume of employment in this and other departments from July, 1913, to June, 1915, is given on pages 26 to 55; and an explanation of the scope of the investigation and of the methods employed is given on pages 55 to 59.



TABLE 13.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS, BY OCCUPATIONS, 1907 TO 1915—BLAST FURNACES.

[The figures for each group of years are for identical plants.]

| Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |                  |                      | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                      | Average full-time weekly earnings. |         |
|-----------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|----------------------|------------------|----------------------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|----------------------|------------------------------------|---------|
|                                   |       |                      |                                   | 60 and under.                                              | Over 60 and under 72 | 72               | Over 72 and under 84 |                                 | Under 12 cts.                                       | 12 and under 14 cts. | 14 and under 16 cts. | 16 and under 18 cts. | 18 cts. and over.    |                                    |         |
|                                   |       |                      |                                   |                                                            |                      |                  |                      |                                 |                                                     |                      |                      |                      |                      |                                    |         |
| Laborers:                         |       |                      |                                   |                                                            |                      |                  |                      |                                 |                                                     |                      |                      |                      |                      |                                    |         |
| 20 plants.....                    | 1907  | 957                  | 75.8                              | 11                                                         | 37                   | ( <sup>1</sup> ) | 5                    | 47                              | \$0.146                                             | 4                    | 29                   | 40                   | 28                   | .....                              | \$11.13 |
|                                   | 1908  | 718                  | 72.8                              | 20                                                         | 38                   |                  | 15                   | 27                              | .140                                                | 25                   | 10                   | 41                   | 24                   | .....                              | 10.24   |
|                                   | 1909  | 757                  | 73.0                              | 14                                                         | 50                   | 2                | 7                    | 28                              | .138                                                | 24                   | 26                   | 24                   | 26                   | .....                              | 10.17   |
|                                   | 1910  | 902                  | 73.6                              | 18                                                         | 37                   | 3                | 5                    | 38                              | .152                                                | 4                    | 22                   | 21                   | 53                   | .....                              | 11.18   |
| 34 plants.....                    | 1910  | 1,423                | 74.7                              | 19                                                         | 28                   | 2                | 21                   | 30                              | .150                                                | 3                    | 23                   | 33                   | 41                   | .....                              | 11.23   |
|                                   | 1911  | 935                  | 73.3                              | 21                                                         | 31                   | 3                | 14                   | 31                              | .151                                                | 4                    | 26                   | 24                   | 46                   | .....                              | 11.13   |
| 35 plants.....                    | 1911  | 937                  | 73.3                              | 21                                                         | 31                   | 3                | 14                   | 31                              | .151                                                | 4                    | 26                   | 24                   | 46                   | .....                              | 11.14   |
|                                   | 1912  | 961                  | 73.1                              | 20                                                         | 31                   | 8                | 10                   | 31                              | .152                                                | 3                    | 25                   | 24                   | 48                   | ( <sup>1</sup> )                   | 11.15   |
| 35 plants.....                    | 1912  | 1,049                | 73.1                              | 20                                                         | 30                   | 10               | 9                    | 31                              | .152                                                | 3                    | 23                   | 26                   | 47                   | ( <sup>1</sup> )                   | 11.15   |
|                                   | 1913  | 1,273                | 72.5                              | 22                                                         | 34                   | 10               | 4                    | 30                              | .171                                                | 1                    | 14                   | 17                   | 20                   | 48                                 | 12.43   |
| 34 plants.....                    | 1913  | 1,193                | 72.5                              | 29                                                         | 22                   | 10               | 5                    | 33                              | .173                                                | 1                    | 13                   | 13                   | 18                   | 55                                 | 12.65   |
|                                   | 1914  | 1,010                | 70.8                              | 31                                                         | 11                   | 25               | 8                    | 24                              | .176                                                | ( <sup>1</sup> )     | 9                    | 14                   | 19                   | 57                                 | 12.47   |
| 37 plants.....                    | 1914  | 1,066                | 70.8                              | 35                                                         | 12                   | 21               | 7                    | 25                              | .177                                                | 2                    | 8                    | 11                   | 18                   | 61                                 | 12.52   |
|                                   | 1915  | 885                  | 71.3                              | 31                                                         | 16                   | 19               | 7                    | 26                              | .171                                                | 5                    | 12                   | 11                   | 23                   | 49                                 | 12.20   |
|                                   |       |                      |                                   |                                                            |                      |                  |                      |                                 |                                                     | Under 14 cts.        | 14 and under 16 cts. | 16 and under 18 cts. | 18 and under 20 cts. | 20 cts. and over.                  |         |
| Bottom fillers:                   |       |                      |                                   |                                                            |                      |                  |                      |                                 |                                                     |                      |                      |                      |                      |                                    |         |
| 7 plants.....                     | 1907  | 293                  | 84.0                              | .....                                                      | .....                | .....            | .....                | 100                             | .160                                                | 36                   | 11                   | 30                   | 23                   | .....                              | 13.40   |
|                                   | 1908  | 194                  | 84.0                              | .....                                                      | .....                | .....            | .....                | 100                             | .150                                                | 40                   | 18                   | 22                   | 21                   | .....                              | 12.59   |
|                                   | 1909  | 282                  | 84.0                              | .....                                                      | .....                | .....            | .....                | 100                             | .138                                                | 69                   | .....                | 17                   | 14                   | .....                              | 11.61   |
|                                   | 1910  | 267                  | 84.0                              | .....                                                      | .....                | .....            | .....                | 100                             | .160                                                | 33                   | 19                   | 30                   | 19                   | .....                              | 13.41   |
| 14 plants.....                    | 1910  | 672                  | 84.0                              | .....                                                      | .....                | .....            | .....                | 100                             | .152                                                | 26                   | 48                   | 14                   | 12                   | .....                              | 12.77   |
|                                   | 1911  | 391                  | 84.0                              | .....                                                      | .....                | .....            | .....                | 100                             | .148                                                | 35                   | 40                   | 9                    | 16                   | .....                              | 12.46   |
| 15 plants.....                    | 1911  | 417                  | 84.0                              | .....                                                      | .....                | .....            | .....                | 100                             | .149                                                | 33                   | 42                   | 10                   | 15                   | .....                              | 12.50   |
|                                   | 1912  | 468                  | 82.2                              | .....                                                      | .....                | 15               | .....                | 85                              | .152                                                | 28                   | 45                   | 12                   | 16                   | .....                              | 12.53   |
| 14 plants.....                    | 1912  | 423                  | 82.0                              | .....                                                      | .....                | 16               | .....                | 84                              | .153                                                | 31                   | 34                   | 18                   | 18                   | .....                              | 12.63   |
|                                   | 1913  | 461                  | 81.6                              | .....                                                      | .....                | 20               | .....                | 80                              | .167                                                | 21                   | 41                   | .....                | 21                   | 17                                 | 13.74   |
| 13 plants.....                    | 1913  | 469                  | 82.1                              | .....                                                      | .....                | 16               | .....                | 84                              | .168                                                | 18                   | 34                   | 18                   | 12                   | 17                                 | 13.88   |
|                                   | 1914  | 360                  | 82.0                              | .....                                                      | .....                | 17               | .....                | 83                              | .167                                                | 16                   | 30                   | 28                   | 12                   | 13                                 | 13.76   |
| 9 plants.....                     | 1914  | 208                  | 83.3                              | .....                                                      | .....                | 6                | .....                | 94                              | .174                                                | 7                    | 11                   | 49                   | 20                   | 13                                 | 14.52   |
|                                   | 1915  | 148                  | 82.4                              | .....                                                      | .....                | 14               | .....                | 86                              | .176                                                | 9                    | 15                   | 24                   | 32                   | 19                                 | 14.48   |
| Cinder men:                       |       |                      |                                   |                                                            |                      |                  |                      |                                 |                                                     |                      |                      |                      |                      |                                    |         |
| 20 plants.....                    | 1907  | 262                  | 83.6                              | .....                                                      | 2                    | .....            | 10                   | 88                              | .173                                                | 5                    | 24                   | 45                   | 9                    | 16                                 | 14.46   |
|                                   | 1908  | 245                  | 82.6                              | .....                                                      | 8                    | .....            | 10                   | 82                              | .156                                                | 22                   | 34                   | 34                   | .....                | 10                                 | 12.83   |
|                                   | 1909  | 380                  | 82.2                              | 1                                                          | 9                    | .....            | 13                   | 78                              | .150                                                | 34                   | 20                   | 40                   | .....                | 6                                  | 12.31   |
|                                   | 1910  | 357                  | 82.9                              | ( <sup>1</sup> )                                           | 7                    | .....            | 7                    | 87                              | .166                                                | 12                   | 12                   | 63                   | 12                   | 2                                  | 13.78   |
| 32 plants.....                    | 1910  | 482                  | 82.9                              | ( <sup>1</sup> )                                           | 7                    | .....            | 4                    | 89                              | .163                                                | 12                   | 20                   | 58                   | 9                    | 2                                  | 13.56   |
|                                   | 1911  | 339                  | 81.3                              | .....                                                      | 10                   | 10               | 2                    | 78                              | .158                                                | 23                   | 21                   | 46                   | 10                   | 1                                  | 12.84   |
| 32 plants.....                    | 1911  | 333                  | 81.3                              | .....                                                      | 10                   | 11               | 2                    | 78                              | .158                                                | 23                   | 22                   | 44                   | 10                   | 1                                  | 12.82   |
|                                   | 1912  | 397                  | 75.2                              | 23                                                         | 11                   | 9                | ( <sup>1</sup> )     | 56                              | .164                                                | 11                   | 29                   | 37                   | 16                   | 8                                  | 12.20   |
| 33 plants.....                    | 1912  | 356                  | 77.3                              | 15                                                         | 10                   | 12               | ( <sup>1</sup> )     | 63                              | .162                                                | 12                   | 23                   | 44                   | 19                   | 2                                  | 12.49   |
|                                   | 1913  | 380                  | 79.9                              | 1                                                          | 12                   | 15               | 7                    | 64                              | .179                                                | 9                    | 12                   | 13                   | 36                   | 31                                 | 14.27   |
| 31 plants.....                    | 1913  | 357                  | 80.3                              | 2                                                          | 12                   | 11               | 7                    | 68                              | .183                                                | 6                    | 12                   | 11                   | 38                   | 33                                 | 14.62   |
|                                   | 1914  | 285                  | 78.2                              | 4                                                          | 14                   | 25               | ( <sup>1</sup> )     | 57                              | .177                                                | 11                   | 11                   | 15                   | 35                   | 27                                 | 13.82   |
| 31 plants.....                    | 1914  | 286                  | 78.3                              | 3                                                          | 13                   | 27               | ( <sup>1</sup> )     | 57                              | .176                                                | 12                   | 13                   | 13                   | 35                   | 28                                 | 13.78   |
|                                   | 1915  | 254                  | 78.6                              | 6                                                          | 9                    | 24               | .....                | 62                              | .174                                                | 18                   | 11                   | 14                   | 31                   | 27                                 | 13.64   |

<sup>1</sup> Less than one-half of 1 per cent.<sup>2</sup> Including less than one-half of 1 per cent whose full-time hours per week were 91.

TABLE 13.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS, BY OCCUPATIONS, 1907 TO 1915—BLAST FURNACES—Continued.

| Occupation, and number of plants.      | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |                      |    | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                   | Average full-time weekly earnings. |         |
|----------------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|----------------------|----------------------|----|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|-------------------|------------------------------------|---------|
|                                        |       |                      |                                   | 60 and under.                                              | Over 60 and under 72 | Over 72 and under 84 | 84 |                                 | Under 14 cts.                                       | 14 and under 16 cts. | 16 and under 18 cts. | 18 and under 20 cts. | 20 cts. and over. |                                    |         |
|                                        |       |                      |                                   |                                                            |                      |                      |    |                                 |                                                     |                      |                      |                      |                   |                                    |         |
| Keepers' helpers:<br>20 plants.....    | 1907  | 616                  | 84.0                              |                                                            |                      |                      |    | 100                             | \$0.165                                             | 23                   | 8                    | 35                   | 19                | 16                                 | \$13.89 |
|                                        | 1908  | 409                  | 84.0                              |                                                            |                      |                      |    | 100                             | .160                                                | 28                   | 4                    | 39                   | 22                | 7                                  | 13.41   |
|                                        | 1909  | 596                  | 84.0                              |                                                            |                      |                      |    | 100                             | .155                                                | 32                   | 9                    | 35                   | 20                | 3                                  | 13.04   |
|                                        | 1910  | 608                  | 84.0                              |                                                            |                      |                      |    | 100                             | .169                                                | 16                   | 14                   | 31                   | 32                | 8                                  | 14.22   |
| 34 plants.....                         | 1910  | 877                  | 84.0                              |                                                            |                      |                      |    | 100                             | .168                                                | 16                   | 17                   | 31                   | 28                | 8                                  | 14.13   |
|                                        | 1911  | 734                  | 83.1                              |                                                            |                      | 8                    |    | 92                              | .167                                                | 21                   | 13                   | 27                   | 32                | 8                                  | 13.83   |
| 35 plants.....                         | 1911  | 742                  | 83.1                              |                                                            |                      | 8                    |    | 92                              | .167                                                | 21                   | 13                   | 27                   | 32                | 8                                  | 13.84   |
|                                        | 1912  | 846                  | 81.0                              | 4                                                          |                      | 15                   |    | 81                              | .170                                                | 16                   | 16                   | 23                   | 33                | 12                                 | 13.74   |
| 36 plants.....                         | 1912  | 870                  | 80.2                              | 8                                                          |                      | 14                   |    | 78                              | .173                                                | 15                   | 16                   | 23                   | 32                | 15                                 | 13.75   |
|                                        | 1913  | 902                  | 82.2                              |                                                            |                      | 15                   |    | 85                              | .186                                                | 8                    | 14                   | 12                   | 9                 | 57                                 | 15.30   |
| 35 plants.....                         | 1913  | 950                  | 82.2                              |                                                            |                      | 15                   |    | 85                              | .186                                                | 9                    | 12                   | 12                   | 9                 | 58                                 | 15.31   |
|                                        | 1914  | 695                  | 80.4                              |                                                            |                      | 29                   | 7  | 64                              | .186                                                | 10                   | 10                   | 15                   | 8                 | 57                                 | 14.87   |
| 38 plants.....                         | 1914  | 734                  | 80.6                              |                                                            |                      | 28                   | 7  | 66                              | .185                                                | 13                   | 7                    | 15                   | 8                 | 57                                 | 14.83   |
|                                        | 1915  | 727                  | 80.1                              |                                                            |                      | 30                   | 5  | 65                              | .182                                                | 18                   | 9                    | 10                   | 8                 | 55                                 | 14.48   |
| Larry men's helpers:<br>10 plants..... | 1907  | 115                  | 84.0                              |                                                            |                      |                      |    | 100                             | .159                                                | 9                    | 30                   | 62                   |                   |                                    | 13.35   |
|                                        | 1908  | 79                   | 84.0                              |                                                            |                      |                      |    | 100                             | .152                                                | 13                   | 46                   | 42                   |                   |                                    | 12.80   |
|                                        | 1909  | 135                  | 84.0                              |                                                            |                      |                      |    | 100                             | .149                                                | 36                   | 30                   | 34                   |                   |                                    | 12.53   |
|                                        | 1910  | 134                  | 84.0                              |                                                            |                      |                      |    | 100                             | .163                                                | 6                    | 29                   | 50                   | 15                |                                    | 13.69   |
| 19 plants.....                         | 1910  | 278                  | 84.0                              |                                                            |                      |                      |    | 100                             | .165                                                | 5                    | 24                   | 64                   | 7                 |                                    | 13.88   |
|                                        | 1911  | 294                  | 82.6                              |                                                            |                      | 12                   |    | 88                              | .168                                                | 5                    | 16                   | 73                   | 7                 |                                    | 13.89   |
|                                        | 1912  | 343                  | 79.6                              | 11                                                         |                      | 13                   |    | 77                              | .173                                                | 4                    | 5                    | 74                   | 6                 | 11                                 | 13.67   |
| 23 plants.....                         | 1912  | 359                  | 79.6                              | 10                                                         |                      | 14                   |    | 76                              | .172                                                | 5                    | 6                    | 73                   | 7                 | 10                                 | 13.64   |
|                                        | 1913  | 342                  | 82.6                              |                                                            |                      | 12                   |    | 88                              | .190                                                | 5                    | 1                    | 8                    | 42                | 44                                 | 15.69   |
| 23 plants.....                         | 1913  | 352                  | 82.6                              |                                                            |                      | 11                   |    | 89                              | .191                                                | 3                    | 1                    | 7                    | 46                | 42                                 | 15.78   |
|                                        | 1914  | 238                  | 78.5                              |                                                            |                      | 44                   | 3  | 53                              | .189                                                | 4                    | 2                    | 8                    | 55                | 31                                 | 14.79   |
| 27 plants.....                         | 1914  | 250                  | 78.6                              |                                                            |                      | 43                   | 3  | 54                              | .187                                                | 6                    | 2                    | 9                    | 54                | 30                                 | 14.67   |
|                                        | 1915  | 275                  | 78.3                              |                                                            |                      | 46                   | 3  | 51                              | .185                                                | 8                    | 2                    | 11                   | 43                | 36                                 | 14.43   |
| Pig-machine men:<br>9 plants.....      | 1907  | 193                  | 84.0                              |                                                            |                      |                      |    | 100                             | .167                                                | 13                   | 16                   | 57                   | 3                 | 11                                 | 14.03   |
|                                        | 1908  | 157                  | 83.9                              |                                                            |                      |                      | 2  | 98                              | .163                                                | 12                   | 8                    | 69                   | 8                 | 4                                  | 13.69   |
|                                        | 1909  | 152                  | 83.9                              |                                                            |                      |                      | 2  | 98                              | .162                                                | 15                   | 7                    | 65                   | 9                 | 4                                  | 13.57   |
|                                        | 1910  | 182                  | 83.8                              | 1                                                          | 1                    |                      |    | 99                              | .170                                                | 7                    | 15                   | 51                   | 24                | 3                                  | 14.27   |
| 16 plants.....                         | 1910  | 291                  | 83.9                              | (1)                                                        | (1)                  |                      |    | 99                              | .169                                                | 6                    | 15                   | 57                   | 20                | 2                                  | 14.14   |
|                                        | 1911  | 259                  | 82.4                              | (1)                                                        |                      | 13                   |    | 87                              | .169                                                | 11                   | 13                   | 53                   | 18                | 5                                  | 13.90   |
| 17 plants.....                         | 1911  | 267                  | 82.4                              | (1)                                                        |                      | 12                   |    | 87                              | .169                                                | 11                   | 13                   | 52                   | 20                | 5                                  | 13.98   |
|                                        | 1912  | 275                  | 81.9                              | (1)                                                        |                      | 17                   |    | 83                              | .171                                                | 7                    | 8                    | 63                   | 18                | 4                                  | 13.97   |
|                                        | 1913  | 290                  | 81.8                              | (1)                                                        |                      | 17                   |    | 82                              | .192                                                | 3                    | 3                    | 12                   | 39                | 43                                 | 15.69   |
| 19 plates.....                         | 1913  | 303                  | 81.9                              | (1)                                                        |                      | 17                   |    | 83                              | .192                                                | 3                    | 3                    | 15                   | 31                | 49                                 | 15.72   |
|                                        | 1914  | 236                  | 79.4                              | (1)                                                        |                      | 33                   | 9  | 57                              | .192                                                | 3                    | 3                    | 15                   | 28                | 52                                 | 15.25   |
| 21 plants.....                         | 1914  | 259                  | 79.2                              | (1)                                                        |                      | 36                   | 8  | 55                              | .192                                                | 3                    | 2                    | 17                   | 28                | 50                                 | 15.15   |
|                                        | 1915  | 245                  | 79.6                              | (1)                                                        | 1                    | 32                   | 7  | 59                              | .190                                                | 3                    | 4                    | 20                   | 33                | 40                                 | 15.07   |
| Stockers:<br>18 plants.....            | 1907  | 824                  | 81.4                              | 2                                                          | 9                    | 13                   |    | 77                              | .170                                                | 14                   | 15                   | 53                   | 1                 | 17                                 | 13.83   |
|                                        | 1908  | 473                  | 79.1                              | 1                                                          | 26                   | 15                   | 58 | 157                             | .157                                                | 19                   | 26                   | 40                   | 6                 | 9                                  | 12.43   |
|                                        | 1909  | 737                  | 80.9                              |                                                            | 10                   | 30                   | 60 | 158                             | .158                                                | 28                   | 18                   | 39                   | 7                 | 9                                  | 12.75   |
|                                        | 1910  | 904                  | 81.0                              | (1)                                                        | 8                    | 25                   | 66 | 166                             | .166                                                | 22                   | 9                    | 44                   | 18                | 7                                  | 13.43   |
| 32 plants.....                         | 1910  | 1,445                | 79.9                              | 1                                                          | 18                   | 2                    | 15 | 64                              | .164                                                | 19                   | 20                   | 38                   | 15                | 7                                  | 13.17   |
|                                        | 1911  | 898                  | 79.8                              | 4                                                          | 12                   | 7                    | 16 | 62                              | .167                                                | 16                   | 18                   | 42                   | 17                | 8                                  | 13.36   |
| 32 plants.....                         | 1911  | 904                  | 79.7                              | 4                                                          | 12                   | 7                    | 16 | 62                              | .168                                                | 15                   | 18                   | 44                   | 17                | 7                                  | 13.40   |
|                                        | 1912  | 1,045                | 78.7                              | 4                                                          | 11                   | 13                   | 23 | 49                              | .173                                                | 10                   | 15                   | 47                   | 21                | 8                                  | 13.61   |

<sup>1</sup> Less than one-half of 1 per cent.<sup>2</sup> Including less than one-half of 1 per cent whose full-time hours per week were 91.

TABLE 13.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS, BY OCCUPATIONS, 1907 TO 1915—BLAST FURNACES—Continued.

| Occupation, and number of plants.                   | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                       |    |                       |     | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                   | Average full-time weekly earnings. |
|-----------------------------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|-----------------------|----|-----------------------|-----|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|-------------------|------------------------------------|
|                                                     |       |                      |                                   | 60 and under.                                              | Over 60 and under 72. | 72 | Over 72 and under 84. | 84  |                                 | Under 14 cts.                                       | 14 and under 16 cts. | 16 and under 18 cts. | 18 and under 20 cts. | 20 cts. and over. |                                    |
| Stockers—Concluded.<br>34 plants.....               | 1912  | 1,069                | 78.8                              | 4                                                          | 11                    | 13 | 23                    | 50  | \$0.171                         | 13                                                  | 15                   | 44                   | 20                   | 8                 | \$13.46                            |
|                                                     | 1913  | 1,187                | 78.9                              | 4                                                          | 9                     | 14 | 23                    | 51  | .190                            | 10                                                  | 7                    | 8                    | 32                   | 44                | 14.98                              |
| 33 plants.....                                      | 1913  | 1,269                | 78.0                              | 4                                                          | 18                    | 12 | 22                    | 45  | .192                            | 5                                                   | 7                    | 11                   | 35                   | 41                | 15.00                              |
|                                                     | 1914  | 1,001                | 75.0                              | 4                                                          | 30                    | 22 | 16                    | 27  | .190                            | 3                                                   | 8                    | 14                   | 37                   | 37                | 14.19                              |
| 35 plants.....                                      | 1914  | 1,031                | 74.9                              | 7                                                          | 27                    | 21 | 16                    | 29  | .188                            | 6                                                   | 8                    | 13                   | 38                   | 35                | 14.03                              |
|                                                     | 1915  | 878                  | 74.6                              | 7                                                          | 27                    | 22 | 17                    | 27  | .188                            | 8                                                   | 9                    | 11                   | 31                   | 41                | 13.99                              |
| Top fillers:<br>8 plants.....                       | 1907  | 66                   | 84.0                              |                                                            |                       |    |                       | 100 | .177                            | 24                                                  | 12                   | 9                    | 15                   | 39                | 14.86                              |
|                                                     | 1908  | 44                   | 84.0                              |                                                            |                       |    |                       | 100 | .168                            | 41                                                  |                      | 14                   | 18                   | 27                | 14.15                              |
|                                                     | 1909  | 50                   | 84.0                              |                                                            |                       |    |                       | 100 | .161                            | 44                                                  | 20                   |                      | 12                   | 24                | 13.56                              |
|                                                     | 1910  | 48                   | 84.0                              |                                                            |                       |    |                       | 100 | .181                            | 8                                                   | 33                   | 8                    |                      | 50                | 15.18                              |
| 13 plants.....                                      | 1910  | 142                  | 82.8                              | 4                                                          |                       |    |                       | 96  | .169                            | 3                                                   | 26                   | 54                   |                      | 17                | 13.85                              |
|                                                     | 1911  | 84                   | 82.0                              | 7                                                          |                       |    |                       | 93  | .170                            | 19                                                  | 24                   | 33                   | 2                    | 21                | 13.67                              |
| 14 plants.....                                      | 1911  | 92                   | 82.2                              | 7                                                          |                       |    |                       | 93  | .171                            | 17                                                  | 22                   | 30                   | 11                   | 20                | 13.84                              |
|                                                     | 1912  | 96                   | 80.0                              | 6                                                          |                       | 19 |                       | 75  | .176                            | 13                                                  | 31                   | 15                   | 17                   | 25                | 13.90                              |
| 14 plants.....                                      | 1912  | 96                   | 80.0                              | 6                                                          |                       | 19 |                       | 75  | .175                            | 17                                                  | 27                   | 15                   | 17                   | 25                | 13.81                              |
|                                                     | 1913  | 98                   | 80.3                              | 6                                                          |                       | 16 |                       | 78  | .191                            | 8                                                   | 18                   | 14                   | 22                   | 37                | 15.19                              |
| 13 plants.....                                      | 1913  | 95                   | 81.2                              | 6                                                          |                       | 8  |                       | 85  | .201                            | 4                                                   | 8                    | 13                   | 15                   | 60                | 16.15                              |
|                                                     | 1914  | 80                   | 80.1                              | 8                                                          |                       | 15 |                       | 78  | .199                            | 5                                                   | 15                   | 5                    | 15                   | 60                | 15.71                              |
| 8 plants.....                                       | 1914  | 56                   | 80.1                              | 11                                                         |                       | 7  |                       | 82  | .210                            | 7                                                   |                      |                      | 14                   | 79                | 16.54                              |
|                                                     | 1915  | 44                   | 79.0                              | 14                                                         |                       | 9  |                       | 77  | .213                            | 9                                                   |                      | 5                    | 14                   | 73                | 16.44                              |
| Blowing engineers'<br>assistants:<br>11 plants..... | 1907  | 67                   | 84.0                              |                                                            |                       |    |                       | 100 | .203                            | 9                                                   | 27                   | 49                   | 15                   |                   | 17.02                              |
|                                                     | 1908  | 51                   | 84.0                              |                                                            |                       |    |                       | 100 | .199                            | 16                                                  | 24                   | 45                   | 16                   |                   | 16.72                              |
|                                                     | 1909  | 74                   | 84.0                              |                                                            |                       |    |                       | 100 | .191                            | 16                                                  | 41                   | 30                   | 14                   |                   | 16.08                              |
|                                                     | 1910  | 66                   | 84.0                              |                                                            |                       |    |                       | 100 | .208                            | 9                                                   | 21                   | 55                   | 15                   |                   | 17.43                              |
| 18 plants.....                                      | 1910  | 94                   | 84.0                              |                                                            |                       |    |                       | 100 | .207                            | 9                                                   | 21                   | 60                   | 11                   |                   | 17.38                              |
|                                                     | 1911  | 91                   | 83.2                              |                                                            |                       | 7  |                       | 93  | .205                            | 9                                                   | 23                   | 64                   | 4                    |                   | 17.06                              |
|                                                     | 1912  | 108                  | 80.4                              | 8                                                          |                       | 10 |                       | 82  | .211                            | 7                                                   | 19                   | 67                   | 7                    |                   | 16.85                              |
| 18 plants.....                                      | 1912  | 106                  | 80.8                              | 9                                                          |                       | 7  |                       | 85  | .213                            | 4                                                   | 18                   | 70                   | 8                    |                   | 17.13                              |
|                                                     | 1913  | 94                   | 83.2                              |                                                            |                       | 6  |                       | 94  | .225                            | 4                                                   | 6                    | 66                   | 19                   | 4                 | 18.67                              |
| 18 plants.....                                      | 1913  | 94                   | 83.2                              |                                                            |                       | 6  |                       | 94  | .225                            | 4                                                   | 6                    | 66                   | 19                   | 4                 | 18.67                              |
|                                                     | 1914  | 87                   | 79.1                              |                                                            |                       | 34 | 14                    | 52  | .224                            | 5                                                   | 7                    | 63                   | 23                   | 2                 | 17.68                              |
| 21 plants.....                                      | 1914  | 99                   | 79.0                              |                                                            |                       | 36 | 12                    | 52  | .223                            | 6                                                   | 12                   | 54                   | 24                   | 4                 | 17.57                              |
|                                                     | 1915  | 96                   | 78.3                              |                                                            |                       | 42 | 13                    | 46  | .223                            | 10                                                  | 8                    | 51                   | 25                   | 5                 | 17.41                              |
| Iron handlers and<br>loaders:<br>9 plants.....      | 1907  | 203                  | 73.2                              |                                                            | 60                    |    | 6                     | 34  | .193                            | 18                                                  | 51                   | 25                   |                      | 6                 | 14.20                              |
|                                                     | 1908  | 163                  | 73.0                              |                                                            | 60                    |    | 9                     | 32  | .190                            | 33                                                  | 31                   | 25                   | 3                    | 9                 | 13.95                              |
|                                                     | 1909  | 242                  | 73.6                              |                                                            | 57                    |    | 7                     | 36  | .177                            | 31                                                  | 41                   | 21                   | 7                    |                   | 13.05                              |
|                                                     | 1910  | 177                  | 73.0                              |                                                            | 59                    |    | 10                    | 31  | .195                            | 20                                                  | 45                   | 19                   | 16                   |                   | 14.24                              |
| 18 plants.....                                      | 1910  | 305                  | 74.2                              |                                                            | 59                    |    | 6                     | 35  | .194                            | 18                                                  | 50                   | 18                   | 12                   | 3                 | 14.36                              |
|                                                     | 1911  | 300                  | 72.7                              | 1                                                          | 63                    |    | 6                     | 30  | .195                            | 18                                                  | 43                   | 25                   | 7                    | 7                 | 14.11                              |
| 19 plants.....                                      | 1911  | 308                  | 73.0                              | 1                                                          | 61                    |    | 6                     | 32  | .195                            | 18                                                  | 44                   | 24                   | 7                    | 7                 | 14.17                              |
|                                                     | 1912  | 359                  | 72.2                              | 8                                                          | 50                    | 10 | 5                     | 27  | .195                            | 20                                                  | 49                   | 19                   | 5                    | 8                 | 14.04                              |

TABLE 13.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS, BY OCCUPATIONS, 1907 TO 1915—*BLAST FURNACES*—Continued.

| Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |    |                      | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                   | Average full-time weekly earnings. |         |
|-----------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|----------------------|----|----------------------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|-------------------|------------------------------------|---------|
|                                   |       |                      |                                   | 60 and under.                                              | Over 60 and under 72 | 72 | Over 72 and under 84 |                                 | Under 16 cts.                                       | 16 and under 20 cts. | 20 and under 25 cts. | 25 and under 30 cts. | 30 cts. and over. |                                    |         |
|                                   |       |                      |                                   |                                                            |                      |    |                      |                                 |                                                     |                      |                      |                      |                   |                                    |         |
| Iron handlers and loaders—Concld. | 1912  | 406                  | 73.1                              | 6                                                          | 49                   | 9  | 4                    | 32                              | \$0.206                                             | 16                   | 44                   | 20                   | 5                 | 15                                 | \$15.11 |
| 19 plants.....                    | 1913  | 446                  | 72.5                              | 10                                                         | 47                   | 9  | 4                    | 29                              | .220                                                | 15                   | 37                   | 40                   | 1                 | 18                                 | 16.07   |
| 16 plants.....                    | 1913  | 398                  | 72.0                              | 16                                                         | 43                   | 8  | 5                    | 29                              | .227                                                | 3                    | 31                   | 44                   | 2                 | 20                                 | 16.54   |
|                                   | 1914  | 333                  | 71.5                              | 20                                                         | 37                   | 8  |                      | 34                              | .222                                                | 5                    | 33                   | 38                   | 8                 | 16                                 | 16.09   |
| 16 plants.....                    | 1914  | 305                  | 73.8                              | 6                                                          | 51                   | 3  |                      | 40                              | .218                                                | 17                   | 28                   | 31                   | 6                 | 18                                 | 16.16   |
|                                   | 1915  | 323                  | 74.0                              | 5                                                          | 53                   | 2  |                      | 39                              | .204                                                | 17                   | 41                   | 23                   | 5                 | 14                                 | 15.22   |
| Keepers:                          |       |                      |                                   |                                                            |                      |    |                      |                                 |                                                     |                      |                      |                      |                   |                                    |         |
| 20 plants.....                    | 1907  | 146                  | 84.0                              |                                                            |                      |    |                      | 100                             | .218                                                | 12                   | 7                    | 64                   | 16                |                                    | 18.34   |
|                                   | 1908  | 96                   | 84.0                              |                                                            |                      |    |                      | 100                             | .210                                                | 15                   | 6                    | 75                   | 4                 |                                    | 17.68   |
|                                   | 1909  | 141                  | 84.0                              |                                                            |                      |    |                      | 100                             | .205                                                | 17                   | 6                    | 75                   | 3                 |                                    | 17.26   |
|                                   | 1910  | 142                  | 84.0                              |                                                            |                      |    |                      | 100                             | .219                                                | 8                    | 13                   | 75                   | 4                 |                                    | 18.43   |
| 34 plants.....                    | 1910  | 201                  | 84.0                              |                                                            |                      |    |                      | 100                             | .215                                                | 10                   | 20                   | 67                   | 3                 |                                    | 18.09   |
|                                   | 1911  | 182                  | 82.7                              |                                                            |                      | 11 |                      | 89                              | .217                                                | 10                   | 18                   | 70                   | 2                 |                                    | 17.95   |
| 35 plants.....                    | 1911  | 184                  | 82.7                              |                                                            |                      | 11 |                      | 89                              | .217                                                | 10                   | 17                   | 71                   | 2                 |                                    | 17.95   |
|                                   | 1912  | 216                  | 79.6                              | 8                                                          |                      | 18 |                      | 74                              | .223                                                | 7                    | 19                   | 63                   | 11                |                                    | 17.61   |
| 36 plants.....                    | 1912  | 218                  | 79.6                              | 8                                                          |                      | 17 |                      | 74                              | .223                                                | 6                    | 20                   | 63                   | 11                |                                    | 17.59   |
|                                   | 1913  | 224                  | 81.9                              |                                                            |                      | 18 |                      | 82                              | .234                                                | 4                    | 20                   | 30                   | 47                |                                    | 19.13   |
| 35 plants.....                    | 1913  | 239                  | 82.0                              |                                                            |                      | 17 |                      | 83                              | .235                                                | 3                    | 17                   | 31                   | 49                |                                    | 19.28   |
|                                   | 1914  | 178                  | 79.6                              |                                                            |                      | 34 | 7                    | 60                              | .233                                                | 3                    | 16                   | 30                   | 51                |                                    | 18.52   |
| 38 plants.....                    | 1914  | 184                  | 79.6                              |                                                            |                      | 34 | 7                    | 60                              | .233                                                | 5                    | 14                   | 32                   | 49                |                                    | 18.47   |
|                                   | 1915  | 187                  | 79.4                              |                                                            |                      | 35 | 6                    | 58                              | .232                                                | 9                    | 13                   | 27                   | 51                |                                    | 18.33   |
| Larry men:                        |       |                      |                                   |                                                            |                      |    |                      |                                 |                                                     |                      |                      |                      |                   |                                    |         |
| 11 plants.....                    | 1907  | 132                  | 84.0                              |                                                            |                      |    |                      | 100                             | .195                                                | 18                   | 24                   | 42                   | 15                |                                    | 16.41   |
|                                   | 1908  | 86                   | 84.0                              |                                                            |                      |    |                      | 100                             | .184                                                | 26                   | 23                   | 51                   |                   |                                    | 15.48   |
|                                   | 1909  | 135                  | 84.0                              |                                                            |                      |    |                      | 100                             | .186                                                | 27                   | 50                   | 23                   |                   |                                    | 15.64   |
|                                   | 1910  | 149                  | 84.0                              |                                                            |                      |    |                      | 100                             | .202                                                | 5                    | 36                   | 45                   | 14                |                                    | 16.97   |
| 21 plants.....                    | 1910  | 231                  | 84.0                              |                                                            |                      |    |                      | 100                             | .196                                                | 4                    | 52                   | 35                   | 9                 |                                    | 16.47   |
|                                   | 1911  | 213                  | 82.9                              |                                                            |                      | 9  |                      | 91                              | .194                                                | 5                    | 49                   | 37                   | 8                 |                                    | 15.99   |
|                                   | 1912  | 237                  | 78.1                              | 15                                                         |                      | 14 |                      | 71                              | .200                                                | 4                    | 37                   | 50                   | 9                 |                                    | 15.48   |
| 23 plants.....                    | 1912  | 241                  | 78.2                              | 15                                                         |                      | 14 |                      | 71                              | .199                                                | 5                    | 37                   | 50                   | 9                 |                                    | 15.46   |
|                                   | 1913  | 234                  | 82.3                              |                                                            |                      | 15 |                      | 85                              | .215                                                | 5                    | 9                    | 70                   | 15                |                                    | 17.60   |
| 23 plants.....                    | 1913  | 238                  | 82.3                              |                                                            |                      | 14 |                      | 86                              | .217                                                | 3                    | 9                    | 72                   | 15                |                                    | 17.77   |
|                                   | 1914  | 174                  | 78.6                              |                                                            |                      | 43 | 5                    | 53                              | .218                                                | 3                    | 11                   | 70                   | 15                |                                    | 17.10   |
| 27 plants.....                    | 1914  | 192                  | 78.6                              |                                                            |                      | 43 | 4                    | 53                              | .215                                                | 6                    | 13                   | 68                   | 14                |                                    | 16.88   |
|                                   | 1915  | 212                  | 78.6                              |                                                            |                      | 43 | 4                    | 53                              | .211                                                | 9                    | 11                   | 65                   | 14                |                                    | 16.51   |
| Skip operators:                   |       |                      |                                   |                                                            |                      |    |                      |                                 |                                                     |                      |                      |                      |                   |                                    |         |
| 11 plants.....                    | 1907  | 86                   | 84.0                              |                                                            |                      |    |                      | 100                             | .193                                                | 12                   | 33                   | 54                   | 2                 |                                    | 16.19   |
|                                   | 1908  | 64                   | 84.0                              |                                                            |                      |    |                      | 100                             | .184                                                | 19                   | 34                   | 44                   | 3                 |                                    | 15.49   |
|                                   | 1909  | 94                   | 84.0                              |                                                            |                      |    |                      | 100                             | .183                                                | 9                    | 72                   | 17                   | 2                 |                                    | 15.40   |
|                                   | 1910  | 97                   | 84.0                              |                                                            |                      |    |                      | 100                             | .196                                                | 8                    | 40                   | 50                   | 2                 |                                    | 16.46   |
| 19 plants.....                    | 1910  | 125                  | 84.0                              |                                                            |                      |    |                      | 100                             | .197                                                | 8                    | 39                   | 48                   | 5                 |                                    | 16.56   |
|                                   | 1911  | 124                  | 83.8                              |                                                            |                      | 2  |                      | 98                              | .198                                                | 7                    | 29                   | 57                   | 8                 |                                    | 16.60   |
|                                   | 1912  | 136                  | 79.2                              | 13                                                         |                      | 9  |                      | 78                              | .206                                                | 6                    | 32                   | 40                   | 22                |                                    | 16.14   |
| 20 plants.....                    | 1912  | 138                  | 79.3                              | 13                                                         |                      | 9  |                      | 78                              | .206                                                | 6                    | 32                   | 41                   | 22                |                                    | 16.19   |
|                                   | 1913  | 150                  | 82.9                              |                                                            |                      | 9  |                      | 91                              | .217                                                | 5                    | 13                   | 73                   | 8                 |                                    | 17.95   |
| 22 plants.....                    | 1913  | 158                  | 82.9                              |                                                            |                      | 9  |                      | 91                              | .217                                                | 5                    | 13                   | 75                   | 8                 |                                    | 17.97   |
|                                   | 1914  | 123                  | 79.5                              |                                                            |                      | 34 | 7                    | 59                              | .217                                                | 5                    | 16                   | 68                   | 11                |                                    | 17.26   |
| 28 plants.....                    | 1914  | 139                  | 79.5                              |                                                            |                      | 35 | 6                    | 60                              | .214                                                | 7                    | 17                   | 66                   | 9                 |                                    | 16.98   |
|                                   | 1915  | 152                  | 79.4                              |                                                            |                      | 36 | 5                    | 59                              | .215                                                | 7                    | 20                   | 66                   | 8                 |                                    | 17.03   |

TABLE 13.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS, BY OCCUPATIONS, 1907 TO 1915—BLAST FURNACES—Continued.

| Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |    |                      |     | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                      | Average full-time weekly earnings. |
|-----------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|----------------------|----|----------------------|-----|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|----------------------|------------------------------------|
|                                   |       |                      |                                   | 60 and under.                                              | Over 60 and under 72 | 72 | Over 72 and under 84 | 84  |                                 | Under 16 cts.                                       | 16 and under 20 cts. | 20 and under 25 cts. | 25 and under 30 cts. | 30 cts. and over.    |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |     |                                 |                                                     |                      |                      |                      |                      |                                    |
| Stove tenders:                    |       |                      |                                   |                                                            |                      |    |                      |     |                                 |                                                     |                      |                      |                      |                      |                                    |
| 20 plants.....                    | 1907  | 140                  | 84.0                              |                                                            |                      |    |                      | 100 | \$0.192                         | 14                                                  | 59                   | 19                   | 9                    |                      | \$16.10                            |
|                                   | 1908  | 96                   | 84.0                              |                                                            |                      |    |                      | 100 | .185                            | 19                                                  | 42                   | 40                   |                      |                      | 15.52                              |
|                                   | 1909  | 140                  | 84.0                              |                                                            |                      |    |                      | 100 | .181                            | 22                                                  | 47                   | 31                   |                      |                      | 15.22                              |
|                                   | 1910  | 146                  | 84.0                              |                                                            |                      |    |                      | 100 | .197                            | 11                                                  | 32                   | 58                   |                      |                      | 16.55                              |
| 34 plants.....                    | 1910  | 200                  | 84.0                              |                                                            |                      |    |                      | 100 | .193                            | 14                                                  | 34                   | 52                   |                      |                      | 16.21                              |
|                                   | 1911  | 178                  | 82.7                              |                                                            |                      | 11 |                      | 89  | .190                            | 16                                                  | 35                   | 49                   |                      |                      | 15.69                              |
| 35 plants.....                    | 1911  | 180                  | 82.7                              |                                                            |                      | 11 |                      | 89  | .190                            | 16                                                  | 36                   | 49                   |                      |                      | 15.68                              |
|                                   | 1912  | 212                  | 79.5                              | 9                                                          |                      | 18 |                      | 74  | .195                            | 13                                                  | 28                   | 59                   |                      |                      | 15.42                              |
| 36 plants.....                    | 1912  | 214                  | 79.5                              | 8                                                          |                      | 18 |                      | 74  | .195                            | 14                                                  | 28                   | 58                   |                      |                      | 15.38                              |
|                                   | 1913  | 213                  | 81.8                              |                                                            |                      | 18 |                      | 82  | .211                            | 8                                                   | 16                   | 77                   |                      |                      | 17.24                              |
| 35 plants.....                    | 1913  | 220                  | 81.9                              |                                                            |                      | 17 |                      | 83  | .211                            | 6                                                   | 17                   | 77                   |                      |                      | 17.30                              |
|                                   | 1914  | 177                  | 79.6                              |                                                            |                      | 34 | 7                    | 59  | .209                            | 7                                                   | 18                   | 75                   |                      |                      | 16.54                              |
| 38 plants.....                    | 1914  | 183                  | 79.7                              |                                                            |                      | 33 | 7                    | 61  | .209                            | 8                                                   | 17                   | 75                   |                      |                      | 16.56                              |
|                                   | 1915  | 186                  | 79.4                              |                                                            |                      | 35 | 6                    | 58  | .208                            | 11                                                  | 13                   | 76                   |                      |                      | 16.46                              |
| Unclassified—productive:          |       |                      |                                   |                                                            |                      |    |                      |     |                                 |                                                     |                      |                      |                      |                      |                                    |
| 37 plants.....                    | 1914  | 1,140                | 76.7                              | 10                                                         | 10                   | 25 | 7                    | 48  | .214                            | 10                                                  | 31                   | 33                   | 13                   | 9                    | 16.39                              |
|                                   | 1915  | 1,152                | 75.5                              | 15                                                         | 13                   | 22 | 7                    | 44  | .214                            | 12                                                  | 27                   | 33                   | 13                   | 10                   | 16.07                              |
| Unclassified—nonproductive:       |       |                      |                                   |                                                            |                      |    |                      |     |                                 |                                                     |                      |                      |                      |                      |                                    |
| 38 plants.....                    | 1914  | 2,801                | 70.4                              | 38                                                         | 13                   | 16 | 7                    | 26  | .223                            | 9                                                   | 26                   | 37                   | 15                   | 13                   | 15.51                              |
|                                   | 1915  | 2,497                | 70.9                              | 37                                                         | 12                   | 16 | 6                    | 29  | .224                            | 10                                                  | 23                   | 37                   | 17                   | 14                   | 15.69                              |
|                                   |       |                      |                                   |                                                            |                      |    |                      |     |                                 | Under 20 cts.                                       | 20 and under 30 cts. | 30 and under 40 cts. | 40 and under 50 cts. | 50 and under 60 cts. |                                    |
| Blowing engineers:                |       |                      |                                   |                                                            |                      |    |                      |     |                                 |                                                     |                      |                      |                      |                      |                                    |
| 20 plants.....                    | 1907  | 100                  | 84.0                              |                                                            |                      |    |                      | 100 | .242                            | 20                                                  | 77                   | 3                    |                      |                      | 20.30                              |
|                                   | 1908  | 85                   | 84.0                              |                                                            |                      |    |                      | 100 | .235                            | 16                                                  | 84                   |                      |                      |                      | 19.77                              |
|                                   | 1909  | 103                  | 84.0                              |                                                            |                      |    |                      | 100 | .230                            | 21                                                  | 79                   |                      |                      |                      | 19.35                              |
|                                   | 1910  | 112                  | 84.0                              |                                                            |                      |    |                      | 100 | .245                            | 14                                                  | 79                   | 7                    |                      |                      | 20.59                              |
| 34 plants.....                    | 1910  | 153                  | 84.0                              |                                                            |                      |    |                      | 100 | .243                            | 20                                                  | 75                   | 5                    |                      |                      | 20.39                              |
|                                   | 1911  | 135                  | 83.0                              |                                                            |                      | 8  |                      | 92  | .244                            | 19                                                  | 75                   | 6                    |                      |                      | 20.20                              |
| 35 plants.....                    | 1911  | 137                  | 82.9                              |                                                            |                      | 9  |                      | 91  | .244                            | 19                                                  | 75                   | 6                    |                      |                      | 20.15                              |
|                                   | 1912  | 142                  | 80.6                              | 4                                                          |                      | 18 |                      | 78  | .249                            | 23                                                  | 66                   | 11                   |                      |                      | 19.93                              |
| 35 plants.....                    | 1912  | 142                  | 80.6                              | 4                                                          |                      | 18 |                      | 78  | .249                            | 23                                                  | 66                   | 11                   |                      |                      | 19.93                              |
|                                   | 1913  | 148                  | 81.6                              |                                                            |                      | 20 |                      | 80  | .263                            | 18                                                  | 55                   | 26                   | 1                    |                      | 21.37                              |
| 35 plants.....                    | 1913  | 156                  | 82.0                              |                                                            |                      | 17 |                      | 83  | .260                            | 17                                                  | 59                   | 24                   |                      |                      | 21.28                              |
|                                   | 1914  | 139                  | 79.2                              |                                                            |                      | 37 | 6                    | 56  | .259                            | 15                                                  | 62                   | 23                   |                      |                      | 20.42                              |
| 38 plants.....                    | 1914  | 147                  | 79.3                              |                                                            |                      | 37 | 6                    | 57  | .262                            | 14                                                  | 60                   | 26                   |                      |                      | 20.64                              |
|                                   | 1915  | 153                  | 79.1                              |                                                            |                      | 39 | 6                    | 56  | .262                            | 14                                                  | 61                   | 25                   |                      |                      | 20.64                              |
| Blowers:                          |       |                      |                                   |                                                            |                      |    |                      |     |                                 |                                                     |                      |                      |                      |                      |                                    |
| 18 plants.....                    | 1907  | 78                   | 84.0                              |                                                            |                      |    |                      | 100 | .300                            |                                                     | 41                   | 53                   | 6                    |                      | 25.17                              |
|                                   | 1908  | 68                   | 84.0                              |                                                            |                      |    |                      | 100 | .283                            |                                                     | 62                   | 38                   |                      |                      | 23.74                              |
|                                   | 1909  | 86                   | 84.0                              |                                                            |                      |    |                      | 100 | .286                            |                                                     | 62                   | 38                   |                      |                      | 24.04                              |
|                                   | 1910  | 90                   | 84.0                              |                                                            |                      |    |                      | 100 | .307                            |                                                     | 49                   | 49                   | 2                    |                      | 25.80                              |

<sup>1</sup> Including less than one-half of 1 per cent whose full-time hours per week were 91.<sup>2</sup> Including less than one-half of 1 per cent whose full-time hours per week were 91, and 1 man whose hours were 98.<sup>3</sup> Including 1 per cent whose full-time weekly hours were 91.

TABLE 13.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS, BY OCCUPATIONS, 1907 TO 1915—BLAST FURNACES—Concluded.

| Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |    |                      |      | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                      | Average full-time weekly earnings. |
|-----------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|----------------------|----|----------------------|------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|----------------------|------------------------------------|
|                                   |       |                      |                                   | 60 and under.                                              | Over 60 and under 72 | 72 | Over 72 and under 84 | 84   |                                 | Under 20 cts.                                       | 20 and under 30 cts. | 30 and under 40 cts. | 40 and under 50 cts. | 50 and under 60 cts. |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |      |                                 |                                                     |                      |                      |                      |                      |                                    |
| <b>Blowers—Concluded.</b>         |       |                      |                                   |                                                            |                      |    |                      |      |                                 |                                                     |                      |                      |                      |                      |                                    |
| 32 plants.....                    | 1910  | 131                  | 83.5                              | 2                                                          |                      |    |                      | 98   | \$0.296                         | 1                                                   | 55                   | 42                   | 2                    | \$24.74              |                                    |
|                                   | 1911  | 121                  | 82.9                              |                                                            |                      | 9  |                      | 91   | .306                            | 2                                                   | 47                   | 41                   | 10                   | 25.24                |                                    |
| 33 plants.....                    | 1911  | 123                  | 82.9                              |                                                            |                      | 9  |                      | 91   | .305                            | 2                                                   | 48                   | 41                   | 10                   | 25.21                |                                    |
|                                   | 1912  | 132                  | 80.2                              | 7                                                          |                      | 16 |                      | 77   | .313                            | 2                                                   | 45                   | 40                   | 14                   | 24.84                |                                    |
| 34 plants.....                    | 1912  | 139                  | 80.3                              | 7                                                          |                      | 16 |                      | 78   | .315                            | 1                                                   | 44                   | 40                   | 14                   | 25.01                |                                    |
|                                   | 1913  | 147                  | 82.0                              |                                                            |                      | 17 |                      | 83   | .329                            | 1                                                   | 31                   | 54                   | 10                   | 26.84                |                                    |
| 34 plants.....                    | 1913  | 154                  | 82.2                              |                                                            |                      | 15 |                      | 85   | .332                            | 1                                                   | 29                   | 57                   | 10                   | 27.21                |                                    |
|                                   | 1914  | 130                  | 80.5                              |                                                            | 1                    | 26 | 5                    | 1 68 | .329                            | 2                                                   | 23                   | 62                   | 13                   | 26.42                |                                    |
| 38 plants.....                    | 1914  | 143                  | 80.7                              |                                                            | 1                    | 25 | 5                    | 2 69 | .333                            | 1                                                   | 24                   | 59                   | 16                   | 26.74                |                                    |
|                                   | 1915  | 149                  | 80.6                              |                                                            | 1                    | 26 | 5                    | 2 69 | .336                            |                                                     | 28                   | 52                   | 20                   | 26.93                |                                    |

<sup>1</sup> Including 2 per cent whose full-time weekly hours were 91.<sup>2</sup> Including 1 per cent whose full-time weekly hours were 91.

Referring to the first occupation presented in Table 13, "Laborers," direct comparison can be made of figures for 20 identical plants from 1907 to 1910, for 34 plants for 1910 and 1911, for 35 plants for 1911 and 1912, for 35 plants for 1912 and 1913, for 34 plants for 1913 and 1914, and for 37 plants for 1914 and 1915. The first line shows that in 1907 the 20 blast-furnace plants which furnished information employed 957 laborers, and that the average hours of these laborers, when working full time, was 75.8 hours per week. For 11 per cent of these laborers the full-time hours per week were 60 and under; for 37 per cent, over 60 and under 72; for less than 1 per cent, 72; for 5 per cent, over 72 and under 84; and for 47 per cent, or nearly one-half, 84 hours. The average rate of wages or earnings per hour of laborers in the year considered (1907) was 14.6 cents. Of the total number, 4 per cent earned under 12 cents per hour; 29 per cent received 12 and under 14 cents per hour; 40 per cent received 14 and under 16 cents per hour, and 28 per cent received 16 and under 18 cents per hour. The average earnings for a full week's work was \$11.13. The other lines of the table are read in the same manner.

Referring to the last column of the table, it is seen that in 20 identical plants the average full-time weekly earnings of laborers was \$11.13 in 1907. In the next two years there was a drop to \$10.24 and \$10.17 respectively, and in 1910 an advance to \$11.18. While the average full-time weekly earnings in 1910 in 20 plants was \$11.18, the average in 34 plants for the same year was \$11.23. In the 34 plants there was a decrease from \$11.23 per week in 1910 to \$11.13 in 1911. The

difference between \$11.23 and \$11.13 measures the change from 1910 to 1911. It would not be a proper comparison, however, to state that earnings decreased from \$11.18 in 1910 to \$11.13 in 1911, because of the change in plants and the difference known to exist in the averages for 1910 in the two groups of plants. In 35 plants there was an increase from \$11.14 in 1911 to \$11.15 in 1912, and in the second group of 35 plants an increase from \$11.15 in 1912 to \$12.43 in 1913. Comparing the 34 plants reported for the years 1913 and 1914 a decrease from \$12.65 to \$12.47 is shown. In the next comparison there are 37 plants showing a decrease from \$12.52 in 1914 to \$12.20 per week in 1915. The other items of this table should be studied with like care.

Comparing the full-time earnings for both the years 1914 and 1915 of the several occupations it is seen that the lowest earnings are found in the occupation of laborers; the average being \$12.52 and \$12.20 respectively. Several other occupations receive but little more, bottom fillers, cinder men, keepers' helpers, larry mens' helpers, and stockers all receiving less than \$15 per week. The highest earnings in any occupation of this department are found in the occupation of blowers, the average full-time weekly earnings in this occupation being \$26.74 for the year 1914 and \$26.93 for 1915.

#### INDEX NUMBERS.

Owing to changes in the number of plants reported from year to year, and the consequent differences in the averages for the overlapping year in two groups of plants, it is difficult to make a comparison of the actual data over a period of several years which will give an accurate measure of the changes throughout the period. To aid in making such a comparison, relative or index numbers have been computed from the averages shown in Table 13 for full-time hours per week, rates of wages per hour, and full-time weekly earnings, for each occupation from 1907 to 1915 inclusive. Such figures appear in Table 14, following. These relative or index numbers are simply percentages for which the data for 1915 are taken as a base, or 100 per cent. The relative for each year is the per cent that the average for that year is of the average for 1915. For example, the relative full-time weekly earnings of stockers in 1907 were 95 as compared with 100 in 1915; that is the full-time weekly earnings of stockers in 1907 were 95 per cent of the full-time weekly earnings in this occupation in 1915. The method of computing relative numbers is explained on pages 65 to 67.

Table 14 also shows for each occupation the per cent of increase or decrease in full-time hours per week, rates of wages per hour, and full-time weekly earnings in 1915 as compared with each specified year preceding. Thus the full-time weekly earnings of stockers in 1915 were 5 per cent higher than in 1907, 16 per cent higher than in

1908, 14 per cent higher than in 1909, 8 per cent higher than in 1910, 6 per cent higher than in 1911, 5 per cent higher than in 1912, 6 per cent lower than in 1913, and the same as in 1914.

In other columns of the table is shown the per cent of change in each year as compared with the year immediately preceding. Thus the full-time weekly earnings of stockers in 1908 were 9 per cent lower than in 1907, 2 per cent higher in 1909 than in 1908, 6 per cent higher in 1910 than in 1909, 1 per cent higher in 1911 than in 1910, 1 per cent higher in 1912 than in 1911, 12 per cent higher in 1913 than in 1912, 6 per cent lower in 1914 than in 1913, and the same in 1915 as in 1914. The other items of the table can be studied in like manner. The per cent of increase or decrease is computed from the relative numbers. The figures for the department as a whole ("All occupations") appear at the end of the table.

TABLE 14.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1907 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATIONS—BLAST FURNACES.

| Occupation and year.   | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                        | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in— |                                                      |
|                        |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| <b>Stockers:</b>       |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907                   | 106                                | -6                                           |                                                      | 89                               | +12                                          |                                                      | 95                                  | +5                                           |                                                      |
| 1908                   | 103                                | -3                                           | -3                                                   | 82                               | +22                                          | -8                                                   | 86                                  | +16                                          | -9                                                   |
| 1909                   | 106                                | -6                                           | +3                                                   | 83                               | +20                                          | +1                                                   | 88                                  | +14                                          | +2                                                   |
| 1910                   | 106                                | -6                                           | (1)                                                  | 87                               | +15                                          | +5                                                   | 93                                  | +8                                           | +6                                                   |
| 1911                   | 106                                | -6                                           | (1)                                                  | 88                               | +14                                          | +1                                                   | 94                                  | +6                                           | +1                                                   |
| 1912                   | 104                                | -4                                           | -2                                                   | 91                               | +10                                          | +3                                                   | 95                                  | +5                                           | +1                                                   |
| 1913                   | 104                                | -4                                           | (1)                                                  | 101                              | -1                                           | +11                                                  | 106                                 | -6                                           | +12                                                  |
| 1914                   | 100                                | (1)                                          | -4                                                   | 100                              | (1)                                          | -1                                                   | 100                                 | (1)                                          | -6                                                   |
| 1915                   | 100                                |                                              | (1)                                                  | 100                              |                                              | (1)                                                  | 100                                 |                                              | (1)                                                  |
| <b>Bottom fillers:</b> |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907                   | 104                                | -4                                           |                                                      | 92                               | +9                                           |                                                      | 95                                  | +5                                           |                                                      |
| 1908                   | 104                                | -4                                           | (1)                                                  | 86                               | +16                                          | -7                                                   | 89                                  | +12                                          | -6                                                   |
| 1909                   | 104                                | -4                                           | (1)                                                  | 79                               | +27                                          | -8                                                   | 82                                  | +22                                          | -8                                                   |
| 1910                   | 104                                | -4                                           | (1)                                                  | 92                               | +9                                           | +16                                                  | 95                                  | +5                                           | +16                                                  |
| 1911                   | 104                                | -4                                           | (1)                                                  | 89                               | +12                                          | -3                                                   | 93                                  | +8                                           | -2                                                   |
| 1912                   | 102                                | -2                                           | -2                                                   | 91                               | +10                                          | +2                                                   | 93                                  | +8                                           | (1)                                                  |
| 1913                   | 101                                | -1                                           | -1                                                   | 100                              | (1)                                          | +10                                                  | 101                                 | -1                                           | +9                                                   |
| 1914                   | 101                                | -1                                           | (1)                                                  | 99                               | +1                                           | -1                                                   | 100                                 | (1)                                          | -1                                                   |
| 1915                   | 100                                |                                              | -1                                                   | 100                              |                                              | +1                                                   | 100                                 |                                              | (1)                                                  |
| <b>Top fillers:</b>    |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907                   | 106                                | -6                                           |                                                      | 86                               | +16                                          |                                                      | 93                                  | +8                                           |                                                      |
| 1908                   | 106                                | -6                                           | (1)                                                  | 82                               | +22                                          | -5                                                   | 88                                  | +14                                          | -5                                                   |
| 1909                   | 106                                | -6                                           | (1)                                                  | 78                               | +28                                          | -5                                                   | 85                                  | +18                                          | -3                                                   |
| 1910                   | 106                                | -6                                           | (1)                                                  | 88                               | +14                                          | +13                                                  | 95                                  | +5                                           | +12                                                  |
| 1911                   | 105                                | -5                                           | -1                                                   | 89                               | +12                                          | +1                                                   | 94                                  | +6                                           | -1                                                   |
| 1912                   | 102                                | -2                                           | -3                                                   | 91                               | +10                                          | +2                                                   | 94                                  | +6                                           | (1)                                                  |
| 1913                   | 103                                | -3                                           | +1                                                   | 100                              | (1)                                          | +10                                                  | 103                                 | -3                                           | +10                                                  |
| 1914                   | 101                                | -1                                           | -2                                                   | 99                               | +1                                           | -1                                                   | 101                                 | -1                                           | -2                                                   |
| 1915                   | 100                                |                                              | -1                                                   | 100                              |                                              | +1                                                   | 100                                 |                                              | -1                                                   |

<sup>1</sup> No change.



TABLE 14.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1907 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATIONS—BLAST FURNACES—Continued.

| Occupation and year.                  | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|---------------------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                                       | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in— |                                                      |
|                                       |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| <b>Larry men:</b>                     |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                             | 107                                | -7                                           | .....                                                | 89                               | +12                                          | .....                                                | 96                                  | +4                                           | .....                                                |
| 1908.....                             | 107                                | -7                                           | (1)                                                  | 84                               | +19                                          | -6                                                   | 91                                  | +10                                          | -5                                                   |
| 1909.....                             | 107                                | -7                                           | (1)                                                  | 85                               | +18                                          | +1                                                   | 92                                  | +9                                           | +1                                                   |
| 1910.....                             | 107                                | -7                                           | (1)                                                  | 92                               | +9                                           | +8                                                   | 99                                  | +1                                           | +8                                                   |
| 1911.....                             | 106                                | -6                                           | -1                                                   | 91                               | +10                                          | -1                                                   | 96                                  | +4                                           | -3                                                   |
| 1912.....                             | 100                                | (1)                                          | -6                                                   | 94                               | +6                                           | +3                                                   | 93                                  | +8                                           | -3                                                   |
| 1913.....                             | 105                                | -5                                           | +5                                                   | 101                              | -1                                           | +7                                                   | 106                                 | -6                                           | +14                                                  |
| 1914.....                             | 100                                | (1)                                          | -5                                                   | 102                              | -2                                           | +1                                                   | 102                                 | -2                                           | -4                                                   |
| 1915.....                             | 100                                |                                              | (1)                                                  | 100                              |                                              | -2                                                   | 100                                 |                                              | -2                                                   |
| <b>Larry men's helpers:</b>           |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                             | 107                                | -7                                           | .....                                                | 86                               | +16                                          | .....                                                | 93                                  | +8                                           | .....                                                |
| 1908.....                             | 107                                | -7                                           | (1)                                                  | 82                               | +22                                          | -5                                                   | 90                                  | +11                                          | -3                                                   |
| 1909.....                             | 107                                | -7                                           | (1)                                                  | 81                               | +23                                          | -1                                                   | 90                                  | +14                                          | -2                                                   |
| 1910.....                             | 107                                | -7                                           | (1)                                                  | 88                               | +14                                          | +9                                                   | 88                                  | +4                                           | +9                                                   |
| 1911.....                             | 106                                | -6                                           | -1                                                   | 90                               | +11                                          | +2                                                   | 96                                  | +4                                           | (1)                                                  |
| 1912.....                             | 102                                | -2                                           | -4                                                   | 93                               | +8                                           | +3                                                   | 94                                  | +6                                           | -2                                                   |
| 1913.....                             | 106                                | -6                                           | +4                                                   | 102                              | -2                                           | +10                                                  | 109                                 | -8                                           | +16                                                  |
| 1914.....                             | 100                                | (1)                                          | -6                                                   | 101                              | -1                                           | -1                                                   | 102                                 | -2                                           | -6                                                   |
| 1915.....                             | 100                                |                                              | (1)                                                  | 100                              |                                              | -1                                                   | 100                                 |                                              | -2                                                   |
| <b>Skip operators:</b>                |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                             | 106                                | -6                                           | .....                                                | 89                               | +12                                          | .....                                                | 94                                  | +6                                           | .....                                                |
| 1908.....                             | 106                                | -6                                           | (1)                                                  | 85                               | +18                                          | -4                                                   | 90                                  | +11                                          | -4                                                   |
| 1909.....                             | 106                                | -6                                           | (1)                                                  | 84                               | +19                                          | -1                                                   | 90                                  | +11                                          | (1)                                                  |
| 1910.....                             | 106                                | -6                                           | (1)                                                  | 90                               | +11                                          | +7                                                   | 96                                  | +4                                           | +7                                                   |
| 1911.....                             | 106                                | -6                                           | (1)                                                  | 91                               | +10                                          | +1                                                   | 96                                  | +4                                           | (1)                                                  |
| 1912.....                             | 100                                | (1)                                          | -6                                                   | 94                               | +6                                           | +3                                                   | 94                                  | +6                                           | -2                                                   |
| 1913.....                             | 104                                | -4                                           | +4                                                   | 100                              | (1)                                          | +6                                                   | 104                                 | -4                                           | +11                                                  |
| 1914.....                             | 100                                | (1)                                          | -4                                                   | 100                              | (1)                                          | (1)                                                  | 100                                 | (1)                                          | -4                                                   |
| 1915.....                             | 100                                |                                              | (1)                                                  | 100                              |                                              | (1)                                                  | 100                                 |                                              | (1)                                                  |
| <b>Blowers:</b>                       |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                             | 104                                | -4                                           | .....                                                | 88                               | +14                                          | .....                                                | 93                                  | +8                                           | .....                                                |
| 1908.....                             | 104                                | -4                                           | (1)                                                  | 83                               | +20                                          | -6                                                   | 87                                  | +15                                          | -6                                                   |
| 1909.....                             | 104                                | -4                                           | (1)                                                  | 84                               | +19                                          | +1                                                   | 88                                  | +14                                          | +1                                                   |
| 1910.....                             | 104                                | -4                                           | (1)                                                  | 90                               | +11                                          | +7                                                   | 95                                  | +5                                           | +8                                                   |
| 1911.....                             | 104                                | -4                                           | (1)                                                  | 93                               | +8                                           | +3                                                   | 97                                  | +3                                           | +2                                                   |
| 1912.....                             | 100                                | (1)                                          | -4                                                   | 96                               | +4                                           | +3                                                   | 95                                  | +5                                           | -2                                                   |
| 1913.....                             | 102                                | -2                                           | +2                                                   | 100                              | (1)                                          | +4                                                   | 102                                 | -2                                           | +7                                                   |
| 1914.....                             | 100                                | (1)                                          | -2                                                   | 99                               | +1                                           | -1                                                   | 99                                  | +1                                           | -3                                                   |
| 1915.....                             | 100                                |                                              | (1)                                                  | 100                              |                                              | +1                                                   | 100                                 |                                              | +1                                                   |
| <b>Blowing engineers:</b>             |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                             | 107                                | -7                                           | .....                                                | 92                               | +9                                           | .....                                                | 98                                  | +2                                           | .....                                                |
| 1908.....                             | 107                                | -7                                           | (1)                                                  | 89                               | +12                                          | -3                                                   | 95                                  | +5                                           | -3                                                   |
| 1909.....                             | 107                                | -7                                           | (1)                                                  | 87                               | +15                                          | -2                                                   | 93                                  | +8                                           | -2                                                   |
| 1910.....                             | 107                                | -7                                           | (1)                                                  | 93                               | +8                                           | +7                                                   | 99                                  | +1                                           | +6                                                   |
| 1911.....                             | 106                                | -6                                           | -1                                                   | 93                               | +8                                           | (1)                                                  | 98                                  | +2                                           | -1                                                   |
| 1912.....                             | 103                                | -3                                           | -3                                                   | 95                               | +5                                           | +2                                                   | 97                                  | +3                                           | -1                                                   |
| 1913.....                             | 104                                | -4                                           | +1                                                   | 100                              | (1)                                          | +5                                                   | 104                                 | -4                                           | +7                                                   |
| 1914.....                             | 100                                | (1)                                          | -4                                                   | 100                              | (1)                                          | (1)                                                  | 100                                 | (1)                                          | -4                                                   |
| 1915.....                             | 100                                |                                              | (1)                                                  | 100                              |                                              | (1)                                                  | 100                                 |                                              | (1)                                                  |
| <b>Blowing engineers' assistants:</b> |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                             | 108                                | -7                                           | .....                                                | 91                               | +10                                          | .....                                                | 98                                  | +2                                           | .....                                                |
| 1908.....                             | 108                                | -7                                           | (1)                                                  | 89                               | +12                                          | -2                                                   | 97                                  | +3                                           | -1                                                   |
| 1909.....                             | 108                                | -7                                           | (1)                                                  | 86                               | +16                                          | -3                                                   | 93                                  | +8                                           | -4                                                   |
| 1910.....                             | 108                                | -7                                           | (1)                                                  | 93                               | +8                                           | +8                                                   | 101                                 | -1                                           | +9                                                   |
| 1911.....                             | 107                                | -7                                           | -1                                                   | 92                               | +9                                           | -1                                                   | 99                                  | +1                                           | -2                                                   |
| 1912.....                             | 103                                | -3                                           | -4                                                   | 95                               | +5                                           | +3                                                   | 98                                  | +2                                           | -1                                                   |
| 1913.....                             | 106                                | -6                                           | +3                                                   | 100                              | (1)                                          | +5                                                   | 107                                 | -7                                           | +9                                                   |
| 1914.....                             | 101                                | -1                                           | -5                                                   | 100                              | (1)                                          | (1)                                                  | 101                                 | -1                                           | -6                                                   |
| 1915.....                             | 100                                |                                              | -1                                                   | 100                              |                                              | (1)                                                  | 100                                 |                                              | -1                                                   |

<sup>1</sup> No change.

TABLE 14.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1907 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATIONS—BLAST FURNACES—Continued.

| Occupation and year.              | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|-----------------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                                   | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in— |                                                      |
|                                   |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| <b>Stove tenders:</b>             |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.                             | 106                                | —6                                           |                                                      | 91                               | +10                                          |                                                      | 96                                  | +4                                           |                                                      |
| 1908.                             | 106                                | —6                                           | (1)                                                  | 87                               | +15                                          | —4                                                   | 92                                  | +9                                           | —4                                                   |
| 1909.                             | 105                                | —6                                           | (1)                                                  | 85                               | +18                                          | —2                                                   | 91                                  | +10                                          | —1                                                   |
| 1910.                             | 106                                | —6                                           | (1)                                                  | 93                               | +8                                           | +9                                                   | 99                                  | +1                                           | +9                                                   |
| 1911.                             | 104                                | —4                                           | —2                                                   | 91                               | +10                                          | —2                                                   | 95                                  | +5                                           | —4                                                   |
| 1912.                             | 100                                | (1)                                          | —4                                                   | 94                               | +6                                           | +3                                                   | 94                                  | +6                                           | —1                                                   |
| 1913.                             | 103                                | —3                                           | +3                                                   | 102                              | —2                                           | +9                                                   | 105                                 | —5                                           | +12                                                  |
| 1914.                             | 100                                | (1)                                          | —3                                                   | 101                              | —1                                           | —1                                                   | 101                                 | —1                                           | —4                                                   |
| 1915.                             | 100                                |                                              | (1)                                                  | 100                              |                                              | —1                                                   | 100                                 |                                              | —1                                                   |
| <b>Keepers:</b>                   |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.                             | 106                                | —6                                           |                                                      | 93                               | +8                                           |                                                      | 99                                  | +1                                           |                                                      |
| 1908.                             | 106                                | —6                                           | (1)                                                  | 89                               | +12                                          | —4                                                   | 95                                  | +5                                           | —4                                                   |
| 1909.                             | 105                                | —6                                           | (1)                                                  | 87                               | +15                                          | —2                                                   | 93                                  | +8                                           | —2                                                   |
| 1910.                             | 106                                | —6                                           | (1)                                                  | 93                               | +8                                           | +7                                                   | 99                                  | +1                                           | +6                                                   |
| 1911.                             | 104                                | —4                                           | —2                                                   | 94                               | +6                                           | +1                                                   | 98                                  | +2                                           | —1                                                   |
| 1912.                             | 100                                | (1)                                          | —4                                                   | 97                               | +3                                           | +3                                                   | 96                                  | +4                                           | —2                                                   |
| 1913.                             | 103                                | —3                                           | +3                                                   | 101                              | —1                                           | +4                                                   | 105                                 | —5                                           | +9                                                   |
| 1914.                             | 100                                | (1)                                          | —3                                                   | 100                              | (1)                                          | —1                                                   | 101                                 | —1                                           | —4                                                   |
| 1915.                             | 100                                |                                              | (1)                                                  | 100                              |                                              | (1)                                                  | 100                                 |                                              | —1                                                   |
| <b>Keepers' helpers:</b>          |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.                             | 104                                | —4                                           |                                                      | 91                               | +10                                          |                                                      | 95                                  | +5                                           |                                                      |
| 1908.                             | 104                                | —4                                           | (1)                                                  | 88                               | +14                                          | —3                                                   | 92                                  | +9                                           | —3                                                   |
| 1909.                             | 104                                | —4                                           | (1)                                                  | 86                               | +16                                          | —2                                                   | 90                                  | +11                                          | —2                                                   |
| 1910.                             | 104                                | —4                                           | (1)                                                  | 93                               | +8                                           | +8                                                   | 98                                  | +2                                           | +9                                                   |
| 1911.                             | 103                                | —3                                           | —1                                                   | 93                               | +8                                           | (1)                                                  | 96                                  | +4                                           | —2                                                   |
| 1912.                             | 100                                | (1)                                          | —3                                                   | 95                               | +5                                           | +2                                                   | 95                                  | +5                                           | —1                                                   |
| 1913.                             | 103                                | —3                                           | +3                                                   | 102                              | —2                                           | +7                                                   | 106                                 | —6                                           | +12                                                  |
| 1914.                             | 101                                | —1                                           | —2                                                   | 102                              | —2                                           | (1)                                                  | 102                                 | —2                                           | —4                                                   |
| 1915.                             | 100                                |                                              | —1                                                   | 100                              |                                              | —2                                                   | 100                                 |                                              | —2                                                   |
| <b>Iron handlers and loaders:</b> |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.                             | 105                                | —5                                           |                                                      | 101                              | —1                                           |                                                      | 105                                 | —5                                           |                                                      |
| 1908.                             | 105                                | —5                                           | (1)                                                  | 99                               | +1                                           | —2                                                   | 103                                 | —3                                           | —2                                                   |
| 1909.                             | 105                                | —5                                           | (1)                                                  | 93                               | +8                                           | —6                                                   | 97                                  | +3                                           | —6                                                   |
| 1910.                             | 104                                | —4                                           | —1                                                   | 102                              | —2                                           | +10                                                  | 105                                 | —5                                           | +8                                                   |
| 1911.                             | 102                                | —2                                           | —2                                                   | 102                              | —2                                           | (1)                                                  | 104                                 | —4                                           | —1                                                   |
| 1912.                             | 101                                | —1                                           | —1                                                   | 102                              | —2                                           | (1)                                                  | 103                                 | —3                                           | —1                                                   |
| 1913.                             | 100                                | (1)                                          | —1                                                   | 109                              | —8                                           | +7                                                   | 109                                 | —8                                           | +6                                                   |
| 1914.                             | 100                                | (1)                                          |                                                      | 107                              | —7                                           | —2                                                   | 106                                 | —6                                           | —3                                                   |
| 1915.                             | 100                                |                                              | (1)                                                  | 100                              |                                              | —7                                                   | 100                                 |                                              | —6                                                   |
| <b>Pig-machine men:</b>           |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.                             | 105                                | —5                                           |                                                      | 87                               | +15                                          |                                                      | 92                                  | +9                                           |                                                      |
| 1908.                             | 105                                | —5                                           | (1)                                                  | 85                               | +18                                          | —2                                                   | 90                                  | +11                                          | —2                                                   |
| 1909.                             | 105                                | —5                                           | (1)                                                  | 85                               | +18                                          | (1)                                                  | 89                                  | +12                                          | —1                                                   |
| 1910.                             | 105                                | —5                                           | (1)                                                  | 89                               | +12                                          | +5                                                   | 94                                  | +6                                           | +6                                                   |
| 1911.                             | 103                                | —3                                           | —2                                                   | 89                               | +12                                          | (1)                                                  | 92                                  | +9                                           | —2                                                   |
| 1912.                             | 103                                | —3                                           | (1)                                                  | 90                               | +11                                          | +1                                                   | 92                                  | +9                                           | (1)                                                  |
| 1913.                             | 103                                | —3                                           | (1)                                                  | 101                              | —1                                           | +12                                                  | 104                                 | —4                                           | +13                                                  |
| 1914.                             | 100                                | (1)                                          | —3                                                   | 101                              | —1                                           | (1)                                                  | 101                                 | —1                                           | —3                                                   |
| 1915.                             | 100                                |                                              | (1)                                                  | 100                              |                                              | —1                                                   | 100                                 |                                              | —1                                                   |
| <b>Cinder men:</b>                |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.                             | 110                                | —9                                           |                                                      | 98                               | +2                                           |                                                      | 109                                 | —8                                           |                                                      |
| 1908.                             | 109                                | —8                                           | —1                                                   | 88                               | +14                                          | —10                                                  | 97                                  | +3                                           | —11                                                  |
| 1909.                             | 108                                | —7                                           | —1                                                   | 85                               | +18                                          | —3                                                   | 93                                  | +8                                           | —4                                                   |
| 1910.                             | 109                                | —8                                           | +1                                                   | 94                               | +6                                           | +11                                                  | 104                                 | —4                                           | +12                                                  |
| 1911.                             | 107                                | —7                                           | —2                                                   | 91                               | +10                                          | —3                                                   | 98                                  | +2                                           | —6                                                   |
| 1912.                             | 99                                 | +1                                           | —7                                                   | 95                               | +5                                           | +4                                                   | 94                                  | +6                                           | —4                                                   |
| 1913.                             | 102                                | —2                                           | +3                                                   | 105                              | —5                                           | +11                                                  | 107                                 | —7                                           | +14                                                  |
| 1914.                             | 100                                | (1)                                          | —2                                                   | 101                              | —1                                           | —4                                                   | 101                                 | —1                                           | —6                                                   |
| 1915.                             | 100                                |                                              | (1)                                                  | 100                              |                                              | —1                                                   | 100                                 |                                              | —1                                                   |

1 No change.

TABLE 14.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1907 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATIONS—*BLAST FURNACES*—Concluded.

| Occupation and year.               | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|------------------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                                    | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in— |                                                      |
|                                    |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| <b>Laborers:</b>                   |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                          | 108                                | -7                                           | .....                                                | 86                               | +16                                          | .....                                                | 94                                  | + 6                                          | .....                                                |
| 1908.....                          | 104                                | -4                                           | -4                                                   | 82                               | +22                                          | - 5                                                  | 86                                  | +16                                          | - 9                                                  |
| 1909.....                          | 104                                | -4                                           | (1)                                                  | 81                               | +23                                          | - 1                                                  | 86                                  | +16                                          | (1)                                                  |
| 1910.....                          | 105                                | -5                                           | +1                                                   | 89                               | +12                                          | +10                                                  | 94                                  | + 6                                          | + 9                                                  |
| 1911.....                          | 103                                | -3                                           | -2                                                   | 90                               | +11                                          | + 1                                                  | 93                                  | + 8                                          | - 1                                                  |
| 1912.....                          | 103                                | -3                                           | (1)                                                  | 90                               | +11                                          | (1)                                                  | 93                                  | + 8                                          | (1)                                                  |
| 1913.....                          | 102                                | -2                                           | -1                                                   | 102                              | - 2                                          | +13                                                  | 104                                 | - 4                                          | +12                                                  |
| 1914.....                          | 99                                 | +1                                           | -3                                                   | 104                              | - 4                                          | + 2                                                  | 103                                 | - 3                                          | - 1                                                  |
| 1915.....                          | 100                                | .....                                        | +1                                                   | 100                              | .....                                        | - 4                                                  | 100                                 | .....                                        | - 3                                                  |
| <b>Unclassified—productive:</b>    |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1914.....                          | 102                                | -2                                           | .....                                                | 100                              | (1)                                          | .....                                                | 102                                 | - 2                                          | .....                                                |
| 1915.....                          | 100                                | .....                                        | -2                                                   | 100                              | .....                                        | (1)                                                  | 100                                 | .....                                        | - 2                                                  |
| <b>Unclassified—nonproductive:</b> |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1914.....                          | 99                                 | +1                                           | .....                                                | 100                              | (1)                                          | .....                                                | 99                                  | + 1                                          | .....                                                |
| 1915.....                          | 100                                | .....                                        | +1                                                   | 100                              | .....                                        | (1)                                                  | 100                                 | .....                                        | + 1                                                  |
| <b>All occupations:</b>            |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                          | 106                                | -6                                           | .....                                                | 88                               | +14                                          | .....                                                | 93                                  | + 8                                          | .....                                                |
| 1908.....                          | 104                                | -4                                           | -2                                                   | 84                               | +19                                          | - 5                                                  | 88                                  | +14                                          | - 5                                                  |
| 1909.....                          | 105                                | -5                                           | +1                                                   | 83                               | +20                                          | - 1                                                  | 87                                  | +15                                          | - 1                                                  |
| 1910.....                          | 106                                | -6                                           | +1                                                   | 89                               | +12                                          | + 7                                                  | 94                                  | + 6                                          | + 8                                                  |
| 1911.....                          | 105                                | -5                                           | -1                                                   | 91                               | +10                                          | + 2                                                  | 95                                  | + 5                                          | + 1                                                  |
| 1912.....                          | 102                                | -2                                           | -3                                                   | 93                               | + 8                                          | + 2                                                  | 94                                  | + 6                                          | - 1                                                  |
| 1913.....                          | 103                                | -3                                           | +1                                                   | 101                              | - 1                                          | + 9                                                  | 104                                 | - 4                                          | +11                                                  |
| 1914.....                          | 100                                | (1)                                          | -3                                                   | 100                              | (1)                                          | - 1                                                  | 100                                 | (1)                                          | - 4                                                  |
| 1915.....                          | 100                                | .....                                        | (1)                                                  | 100                              | .....                                        | (1)                                                  | 100                                 | .....                                        | (1)                                                  |

1 No change.

Comparing 1915 with 1909, the year of lowest wage in the department, it appears that the advance in weekly earnings varies in the several occupations from 3 per cent for iron handlers and loaders to 22 per cent for bottom fillers. The reduction in hours in the nine-year period varies in the several occupations from 4 to 9 per cent and in the department as a whole is 6 per cent. Between 1907 and 1910 there was some variation in hours, but the steady decline did not begin until after 1910.

The figures for all occupations combined for years previous to 1914 are based on the principal productive occupations only, but for 1914 and 1915 they are computed on data for all employees in the department including the unclassified groups (see pp. 55 and 56) tabulated for 1914 and 1915 for the first time.

The relative full-time weekly earnings of the department as a whole in 1907 were 93 per cent of such earnings in 1915. The rela-

tive dropped to 88 in 1908 and to 87 in 1909, advanced to 94 in 1910 to 95 in 1911, dropped to 94 in 1912, advanced to 104 in 1913, and dropped to 100 in 1914, the same as the base year 1915. The next column shows that in 1915 the full-time weekly earnings of the department as a whole were 8 per cent higher than in 1907, 14 per cent higher than in 1908, 15 per cent higher than in 1909, 6 per cent higher than in 1910, 5 per cent higher than in 1911, 6 per cent higher than in 1912, 4 per cent lower than in 1913, and the same as in 1914. The third column under "Weekly earnings" for the department as a whole shows that the full-time weekly earnings in 1908 were 5 per cent lower than in 1907; in 1909, 1 per cent lower than in 1908; in 1910, 8 per cent higher than in 1909; in 1911, 1 per cent higher than in 1910; in 1912, 1 per cent lower than in 1911; in 1913, 11 per cent higher than in 1912; in 1914, 4 per cent lower than in 1913; and in 1915 there was no change as compared with 1914.

#### FULL-TIME WORKING DAYS PER WEEK.

The number and per cent of employees in the principal productive occupations in blast-furnace plants whose customary working time per week was 6 days or turns, or 7 days, or variations thereof, are shown in Table 15. The figures are presented for each district and for the four districts combined.

Two sets of figures are given for the plants reported for 1914 and 1915, the first covering only the principal productive occupations, as shown for all of the preceding groups and therefore strictly comparable with them, and the second including the unclassified occupations (see pp. 55 and 56) tabulated for 1914 and 1915 for the first time.

While the blast-furnace process represents a continuous operation, a marked difference is seen in the working days per week of employees in the few years between 1907 and 1915; 7 days was the regular working time of 97 per cent of the employees in the selected occupations in 1907, while in 1915 the number working 7 days per week had been reduced to 59 per cent in the same group of occupations. When all the employees, including the newly introduced unclassified groups, are taken into account only 54 per cent were working 7 days per week in 1915. This reduction is due to the fact that during recent years many establishments have carried into effect a provision to lay off employees one day in 7, thus making the working time for each individual 6 days, while the plant continues in operation 7 days. Under this working condition the 24-hour double turn formerly made by one individual when turns shifted has been practically eliminated.

The most marked evidence of the progress of this plan is seen in the data for the Pittsburgh and the Great Lakes and Middle West districts. The Eastern district has made a considerable reduction in hours per week in this department, while in the Southern district the change seems to be taking a backward turn.

TABLE 15.—NUMBER AND PER CENT OF EMPLOYEES IN EACH DISTRICT WORKING EACH SPECIFIED NUMBER OF DAYS PER WEEK, BY YEARS, 1910 TO 1915—*BLAST FURNACES*.

[The figures for each group of years are for identical plants.]

| District, and number of plants. | Year. | Number of employees. | Number of employees whose customary working time per week was— |                                |                                 |         | Per cent of employees whose customary working time per week was— |                                |                                 |         |
|---------------------------------|-------|----------------------|----------------------------------------------------------------|--------------------------------|---------------------------------|---------|------------------------------------------------------------------|--------------------------------|---------------------------------|---------|
|                                 |       |                      | 6 days.                                                        | 6 days and 7 days alternately. | 6 days, and 7 days in rotation. | 7 days. | 6 days.                                                          | 6 days and 7 days alternately. | 6 days, and 7 days in rotation. | 7 days. |
|                                 |       |                      |                                                                |                                |                                 |         |                                                                  |                                |                                 |         |
| Eastern:                        |       |                      |                                                                |                                |                                 |         |                                                                  |                                |                                 |         |
| 2 plants.....                   | 1907  | 320                  | 33                                                             |                                |                                 | 287     | 10                                                               |                                |                                 | 90      |
|                                 | 1908  | 235                  | 43                                                             |                                |                                 | 192     | 18                                                               |                                |                                 | 82      |
|                                 | 1909  | 328                  | 11                                                             |                                |                                 | 317     | 3                                                                |                                |                                 | 97      |
|                                 | 1910  | 346                  |                                                                |                                |                                 | 346     |                                                                  |                                |                                 | 100     |
| 6 plants.....                   | 1910  | 1,436                | 79                                                             |                                |                                 | 1,357   | 6                                                                |                                |                                 | 95      |
|                                 | 1911  | 779                  | 118                                                            | 2                              |                                 | 659     | 15                                                               | (1)                            |                                 | 85      |
|                                 | 1912  | 684                  | 135                                                            | 2                              |                                 | 547     | 20                                                               | (1)                            |                                 | 80      |
| 6 plants.....                   | 1912  | 660                  | 134                                                            | 2                              |                                 | 524     | 20                                                               | (1)                            |                                 | 79      |
|                                 | 1913  | 743                  | 178                                                            | 2                              |                                 | 563     | 24                                                               | (1)                            |                                 | 76      |
| 6 plants.....                   | 1913  | 811                  | 185                                                            |                                |                                 | 626     | 23                                                               |                                |                                 | 77      |
|                                 | 1914  | 659                  | 184                                                            |                                |                                 | 475     | 28                                                               |                                |                                 | 72      |
| 6 plants.....                   | 1914  | 604                  | 161                                                            |                                |                                 | 443     | 27                                                               |                                |                                 | 73      |
|                                 | 1915  | 421                  | 86                                                             |                                |                                 | 335     | 20                                                               |                                |                                 | 80      |
| 6 plants.....                   | 1914  | 1,078                | 354                                                            | 46                             |                                 | 678     | 33                                                               | 4                              |                                 | 63      |
|                                 | 1915  | 794                  | 256                                                            | 5                              |                                 | 533     | 32                                                               | 1                              |                                 | 67      |
| Pittsburgh:                     |       |                      |                                                                |                                |                                 |         |                                                                  |                                |                                 |         |
| 6 plants.....                   | 1907  | 1,731                | 74                                                             |                                |                                 | 1,657   | 4                                                                |                                |                                 | 96      |
|                                 | 1908  | 1,161                | 87                                                             |                                |                                 | 1,074   | 7                                                                |                                |                                 | 93      |
|                                 | 1909  | 1,683                | 66                                                             |                                |                                 | 1,617   | 4                                                                |                                |                                 | 96      |
|                                 | 1910  | 1,613                | 103                                                            |                                |                                 | 1,510   | 6                                                                |                                |                                 | 94      |
| 9 plants.....                   | 1910  | 2,302                | 111                                                            |                                |                                 | 2,191   | 5                                                                |                                |                                 | 95      |
|                                 | 1911  | 2,135                | 127                                                            |                                |                                 | 2,008   | 6                                                                |                                |                                 | 94      |
| 9 plants.....                   | 1911  | 2,127                | 127                                                            |                                |                                 | 2,000   | 6                                                                |                                |                                 | 94      |
|                                 | 1912  | 2,396                | 101                                                            |                                |                                 | 2,295   | 4                                                                |                                |                                 | 96      |
| 9 plants.....                   | 1912  | 2,415                | 101                                                            |                                |                                 | 2,314   | 4                                                                |                                |                                 | 96      |
|                                 | 1913  | 2,469                | 58                                                             |                                |                                 | 2,411   | 2                                                                |                                |                                 | 98      |
| 10 plants.....                  | 1913  | 2,640                | 65                                                             |                                |                                 | 2,575   | 2                                                                |                                |                                 | 98      |
|                                 | 1914  | 2,105                | 853                                                            | 267                            |                                 | 985     | 41                                                               | 13                             |                                 | 47      |
| 10 plants.....                  | 1914  | 2,061                | 853                                                            | 267                            |                                 | 941     | 41                                                               | 13                             |                                 | 46      |
|                                 | 1915  | 1,980                | 860                                                            | 204                            |                                 | 916     | 43                                                               | 10                             |                                 | 46      |
| 10 plants.....                  | 1914  | 3,298                | 1,466                                                          | 405                            |                                 | 1,427   | 44                                                               | 12                             |                                 | 43      |
|                                 | 1915  | 3,176                | 1,470                                                          | 316                            |                                 | 1,390   | 46                                                               | 10                             |                                 | 44      |
| Great Lakes and Middle West:    |       |                      |                                                                |                                |                                 |         |                                                                  |                                |                                 |         |
| 6 plants.....                   | 1907  | 1,310                | 14                                                             |                                |                                 | 1,296   | 1                                                                |                                |                                 | 99      |
|                                 | 1908  | 947                  | 27                                                             |                                |                                 | 920     | 3                                                                |                                |                                 | 97      |
|                                 | 1909  | 1,163                | 44                                                             |                                |                                 | 1,119   | 4                                                                |                                |                                 | 96      |
|                                 | 1910  | 1,622                | 95                                                             |                                |                                 | 1,527   | 6                                                                |                                |                                 | 94      |
| 9 plants.....                   | 1910  | 2,103                | 116                                                            |                                |                                 | 1,987   | 6                                                                |                                |                                 | 94      |
|                                 | 1911  | 1,302                | 337                                                            |                                |                                 | 965     | 26                                                               |                                |                                 | 74      |
| 10 plants.....                  | 1911  | 1,387                | 343                                                            |                                |                                 | 1,044   | 25                                                               |                                |                                 | 75      |
|                                 | 1912  | 1,648                | 568                                                            |                                |                                 | 1,080   | 34                                                               |                                |                                 | 66      |
| 10 plants.....                  | 1912  | 1,722                | 607                                                            |                                |                                 | 1,115   | 35                                                               |                                |                                 | 65      |
|                                 | 1913  | 1,932                | 665                                                            |                                |                                 | 1,267   | 34                                                               |                                |                                 | 66      |
| 10 plants.....                  | 1913  | 1,928                | 660                                                            |                                |                                 | 1,268   | 34                                                               |                                |                                 | 66      |
|                                 | 1914  | 1,446                | 676                                                            |                                |                                 | 770     | 47                                                               |                                |                                 | 53      |
| 11 plants.....                  | 1914  | 1,650                | 873                                                            |                                |                                 | 777     | 53                                                               |                                |                                 | 47      |
|                                 | 1915  | 1,408                | 796                                                            |                                |                                 | 612     | 57                                                               |                                |                                 | 43      |
| 11 plants.....                  | 1914  | 3,172                | 1,883                                                          |                                | 3                               | 1,286   | 59                                                               |                                | (1)                             | 41      |
|                                 | 1915  | 2,761                | 1,643                                                          |                                | 3                               | 1,115   | 60                                                               |                                | (1)                             | 40      |

<sup>1</sup> Less than one-half of 1 per cent.

TABLE 15.—NUMBER AND PER CENT OF EMPLOYEES IN EACH DISTRICT WORKING EACH SPECIFIED NUMBER OF DAYS PER WEEK, BY YEARS, 1910 TO 1915—*BLAST FURNACES*—Concluded.

| District, and number of plants. | Year. | Number of employees. | Number of employees whose customary working time per week was— |                                |                                         |         | Per cent of employees whose customary working time per week was— |                                |                                         |         |
|---------------------------------|-------|----------------------|----------------------------------------------------------------|--------------------------------|-----------------------------------------|---------|------------------------------------------------------------------|--------------------------------|-----------------------------------------|---------|
|                                 |       |                      | 6 days.                                                        | 6 days and 7 days alternately. | 6 days, 6 days, and 7 days in rotation. | 7 days. | 6 days.                                                          | 6 days and 7 days alternately. | 6 days, 6 days, and 7 days in rotation. | 7 days. |
| Southern:<br>6 plants.....      | 1907  | 917                  | .....                                                          | .....                          | .....                                   | 917     | .....                                                            | .....                          | .....                                   | 100     |
|                                 | 1908  | 685                  | .....                                                          | .....                          | .....                                   | 685     | .....                                                            | .....                          | .....                                   | 100     |
|                                 | 1909  | 930                  | 8                                                              | .....                          | .....                                   | 922     | 1                                                                | .....                          | .....                                   | 99      |
|                                 | 1910  | 800                  | 3                                                              | .....                          | .....                                   | 797     | (1)                                                              | .....                          | .....                                   | 100     |
| 10 plants.....                  | 1910  | 1,209                | 37                                                             | .....                          | .....                                   | 1,172   | 3                                                                | .....                          | .....                                   | 97      |
|                                 | 1911  | 1,032                | 2                                                              | .....                          | .....                                   | 1,030   | (1)                                                              | .....                          | .....                                   | 100     |
| 10 plants.....                  | 1911  | 1,043                | 2                                                              | .....                          | .....                                   | 1,041   | (1)                                                              | .....                          | .....                                   | 100     |
|                                 | 1912  | 1,245                | 267                                                            | .....                          | .....                                   | 978     | 21                                                               | .....                          | .....                                   | 79      |
| 11 plants.....                  | 1912  | 1,304                | 265                                                            | .....                          | .....                                   | 1,039   | 20                                                               | .....                          | .....                                   | 80      |
|                                 | 1913  | 1,445                | 431                                                            | .....                          | .....                                   | 1,014   | 30                                                               | .....                          | .....                                   | 70      |
| 9 plants.....                   | 1913  | 1,257                | 347                                                            | .....                          | .....                                   | 910     | 28                                                               | .....                          | .....                                   | 72      |
|                                 | 1914  | 1,036                | 229                                                            | .....                          | .....                                   | 807     | 22                                                               | .....                          | .....                                   | 78      |
| 11 plants.....                  | 1914  | 997                  | 52                                                             | .....                          | .....                                   | 945     | 5                                                                | .....                          | .....                                   | 95      |
|                                 | 1915  | 1,105                | 67                                                             | .....                          | .....                                   | 1,038   | 6                                                                | .....                          | .....                                   | 94      |
| 11 plants.....                  | 1914  | 1,705                | 198                                                            | .....                          | .....                                   | 1,507   | 12                                                               | .....                          | .....                                   | 88      |
|                                 | 1915  | 1,832                | 230                                                            | .....                          | .....                                   | 1,602   | 13                                                               | .....                          | .....                                   | 87      |
| Total:<br>20 plants.....        | 1907  | 4,278                | 121                                                            | .....                          | .....                                   | 4,157   | 3                                                                | .....                          | .....                                   | 97      |
|                                 | 1908  | 3,028                | 157                                                            | .....                          | .....                                   | 2,871   | 5                                                                | .....                          | .....                                   | 95      |
|                                 | 1909  | 4,104                | 129                                                            | .....                          | .....                                   | 3,975   | 3                                                                | .....                          | .....                                   | 97      |
|                                 | 1910  | 4,381                | 201                                                            | .....                          | .....                                   | 4,180   | 5                                                                | .....                          | .....                                   | 95      |
| 34 plants.....                  | 1910  | 7,050                | 343                                                            | .....                          | .....                                   | 6,707   | 5                                                                | .....                          | .....                                   | 95      |
|                                 | 1911  | 5,268                | 584                                                            | 2                              | .....                                   | 4,682   | 11                                                               | (1)                            | .....                                   | 89      |
| 35 plants.....                  | 1911  | 5,336                | 590                                                            | 2                              | .....                                   | 4,744   | 11                                                               | (1)                            | .....                                   | 89      |
|                                 | 1912  | 5,973                | 1,071                                                          | 2                              | .....                                   | 4,900   | 18                                                               | (1)                            | .....                                   | 82      |
| 36 plants.....                  | 1912  | 6,101                | 1,107                                                          | 2                              | .....                                   | 4,992   | 18                                                               | (1)                            | .....                                   | 82      |
|                                 | 1913  | 6,589                | 1,332                                                          | 2                              | .....                                   | 5,255   | 20                                                               | (1)                            | .....                                   | 80      |
| 35 plants.....                  | 1913  | 6,636                | 1,257                                                          | .....                          | .....                                   | 5,379   | 19                                                               | .....                          | .....                                   | 81      |
|                                 | 1914  | 5,246                | 1,942                                                          | 267                            | .....                                   | 3,037   | 37                                                               | 5                              | .....                                   | 58      |
| 38 plants.....                  | 1914  | 5,312                | 1,939                                                          | 267                            | .....                                   | 3,106   | 37                                                               | 5                              | .....                                   | 58      |
|                                 | 1915  | 4,914                | 1,809                                                          | 204                            | .....                                   | 2,901   | 37                                                               | 4                              | .....                                   | 59      |
| 38 plants.....                  | 1914  | 9,253                | 3,901                                                          | 451                            | 3                                       | 4,898   | 42                                                               | 5                              | (1)                                     | 53      |
|                                 | 1915  | 8,563                | 3,599                                                          | 321                            | 3                                       | 4,640   | 42                                                               | 4                              | (1)                                     | 54      |

<sup>1</sup> Less than one-half of 1 per cent.

Two general tables are presented for the blast-furnace department, as follows:

Table A.—Full-time hours per week, rates of wages per hour, and full-time weekly earnings in the United States, by years, 1907 to 1915.

Table B.—Full-time hours per week, rates of wages per hour, and full-time weekly earnings, in each district, by years, 1913 to 1915.

The data from Table A are summarized in Table 13, percentages being used instead of the actual figures for classified full-time hours per week and rates of wages per hour.

The order in which the occupations are given in Tables A and B and in the table of relative numbers follows that of the process of manufacture. "Identical plants," as used in the tables of this report, are identical units of identical establishments reporting the same occupations in each of two or more consecutive years. For a more extended explanation see page 58.

Figures for each geographical division for each preceding year back to 1907 corresponding to those given for 1913, 1914, and 1915, in Table B were given in Bulletins 151 and 168 of this bureau.

Descriptions of the occupations which are specified in this chapter and of other occupations of the blast-furnace department tabulated as "unclassified" may be found in the Glossary of Occupations, pages 467 to 475.

TABLE A.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER BY YEARS, 1907 TO 1915—

[The figures for each group of

| Line No. | Occupation and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                       |                  |    |                       |     |                       |     |
|----------|----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|-----------------------|------------------|----|-----------------------|-----|-----------------------|-----|
|          |                                  |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56. | 56 and under 60. | 60 | Over 60 and under 72. | 72  | Over 72 and under 84. | 84  |
| 1        | Stockers:                        | 1907  | 824                  | 81.4                              | \$0.170                         | \$13.83                            |                                                |                       |                  | 14 | 74                    |     | 105                   | 631 |
| 2        | 18 plants.....                   | 1908  | 473                  | 79.1                              | .157                            | 12.43                              |                                                |                       |                  | 4  | 123                   |     | 70                    | 276 |
| 3        |                                  | 1909  | 737                  | 80.9                              | .158                            | 12.75                              |                                                |                       |                  |    | 71                    |     | 224                   | 442 |
| 4        |                                  | 1910  | 904                  | 81.0                              | .166                            | 13.43                              |                                                | 1                     |                  |    |                       | 16  | 222                   | 595 |
| 5        | 32 plants.....                   | 1910  | 1,445                | 79.9                              | .164                            | 13.17                              |                                                | 1                     |                  | 12 | 263                   | 30  | 222                   | 917 |
| 6        |                                  | 1911  | 898                  | 79.8                              | .167                            | 13.36                              |                                                |                       | 12               | 21 | 107                   | 59  | 142                   | 557 |
| 7        | 32 plants.....                   | 1911  | 904                  | 79.7                              | .168                            | 13.40                              |                                                |                       | 12               | 25 | 107                   | 59  | 142                   | 559 |
| 8        |                                  | 1912  | 1,045                | 78.7                              | .173                            | 13.61                              |                                                | 1                     | 11               | 26 | 112                   | 136 | 244                   | 515 |
| 9        | 34 plants.....                   | 1912  | 1,069                | 78.8                              | .171                            | 13.46                              |                                                | 1                     | 11               | 26 | 112                   | 138 | 244                   | 537 |
| 10       |                                  | 1913  | 1,187                | 78.9                              | .190                            | 14.98                              |                                                | 1                     | 14               | 34 | 101                   | 161 | 277                   | 599 |
| 11       | 33 plants.....                   | 1913  | 1,269                | 78.0                              | .192                            | 15.00                              |                                                |                       | 14               | 32 | 224                   | 148 | 277                   | 574 |
| 12       |                                  | 1914  | 1,001                | 75.0                              | .190                            | 14.19                              |                                                |                       | 31               | 15 | 301                   | 223 | 164                   | 267 |
| 13       | 35 plants.....                   | 1914  | 1,031                | 74.9                              | .188                            | 14.03                              |                                                |                       | 31               | 42 | 283                   | 217 | 164                   | 294 |
| 14       |                                  | 1915  | 878                  | 74.6                              | .188                            | 13.99                              |                                                |                       | 19               | 40 | 240                   | 192 | 149                   | 238 |
| 15       | Bottom fillers:                  | 1907  | 293                  | 84.0                              | .160                            | 13.40                              |                                                |                       |                  |    |                       |     |                       | 293 |
| 16       | 7 plants.....                    | 1908  | 194                  | 84.0                              | .150                            | 12.59                              |                                                |                       |                  |    |                       |     |                       | 194 |
| 17       |                                  | 1909  | 282                  | 84.0                              | .138                            | 11.61                              |                                                |                       |                  |    |                       |     |                       | 282 |
| 18       |                                  | 1910  | 267                  | 84.0                              | .160                            | 13.41                              |                                                |                       |                  |    |                       |     |                       | 267 |
| 19       | 14 plants.....                   | 1910  | 672                  | 84.0                              | .152                            | 12.77                              |                                                |                       |                  |    |                       |     |                       | 672 |
| 20       |                                  | 1911  | 391                  | 84.0                              | .148                            | 12.46                              |                                                |                       |                  |    |                       |     |                       | 391 |
| 21       | 15 plants.....                   | 1911  | 417                  | 84.0                              | .149                            | 12.50                              |                                                |                       |                  |    |                       |     |                       | 417 |
| 22       |                                  | 1912  | 468                  | 82.2                              | .152                            | 12.53                              |                                                |                       |                  |    |                       | 69  |                       | 399 |
| 23       | 14 plants.....                   | 1912  | 423                  | 82.0                              | .153                            | 12.63                              |                                                |                       |                  |    |                       | 69  |                       | 354 |
| 24       |                                  | 1913  | 461                  | 81.6                              | .167                            | 13.74                              |                                                |                       |                  |    |                       | 91  |                       | 370 |
| 25       | 13 plants.....                   | 1913  | 469                  | 82.1                              | .168                            | 13.88                              |                                                |                       |                  |    |                       | 75  |                       | 394 |
| 26       |                                  | 1914  | 360                  | 82.0                              | .167                            | 13.76                              |                                                |                       |                  |    |                       | 60  |                       | 300 |
| 27       | 9 plants.....                    | 1914  | 208                  | 81.3                              | .174                            | 14.52                              |                                                |                       |                  |    |                       | 12  |                       | 196 |
| 28       |                                  | 1915  | 148                  | 82.4                              | .176                            | 14.48                              |                                                |                       |                  |    |                       | 20  |                       | 128 |
| 29       | Top fillers:                     | 1907  | 66                   | 84.0                              | .177                            | 14.86                              |                                                |                       |                  |    |                       |     |                       | 66  |
| 30       | 8 plants.....                    | 1908  | 44                   | 84.0                              | .168                            | 14.15                              |                                                |                       |                  |    |                       |     |                       | 44  |
| 31       |                                  | 1909  | 50                   | 84.0                              | .161                            | 13.56                              |                                                |                       |                  |    |                       |     |                       | 50  |
| 32       |                                  | 1910  | 48                   | 84.0                              | .181                            | 15.18                              |                                                |                       |                  |    |                       |     |                       | 48  |
| 33       | 13 plants.....                   | 1910  | 142                  | 82.8                              | .169                            | 13.85                              |                                                |                       | 6                |    |                       |     |                       | 136 |
| 34       |                                  | 1911  | 84                   | 82.0                              | .170                            | 13.67                              |                                                |                       | 6                |    |                       |     |                       | 78  |
| 35       | 14 plants.....                   | 1911  | 92                   | 82.2                              | .171                            | 13.84                              |                                                |                       | 6                |    |                       |     |                       | 86  |
| 36       |                                  | 1912  | 96                   | 80.0                              | .176                            | 13.90                              |                                                |                       | 6                |    |                       | 18  |                       | 72  |
| 37       | 14 plants.....                   | 1912  | 96                   | 80.0                              | .175                            | 13.81                              |                                                |                       | 6                |    |                       | 18  |                       | 72  |
| 38       |                                  | 1913  | 98                   | 80.3                              | .191                            | 15.19                              |                                                |                       | 6                |    |                       | 16  |                       | 76  |
| 39       | 13 plants.....                   | 1913  | 95                   | 81.2                              | .201                            | 16.15                              |                                                |                       | 6                |    |                       | 8   |                       | 81  |
| 40       |                                  | 1914  | 80                   | 80.1                              | .199                            | 15.71                              |                                                |                       | 6                |    |                       | 12  |                       | 62  |
| 41       | 8 plants.....                    | 1914  | 56                   | 80.1                              | .210                            | 16.54                              |                                                |                       | 6                |    |                       | 4   |                       | 46  |
| 42       |                                  | 1915  | 44                   | 79.0                              | .213                            | 16.44                              |                                                |                       | 6                |    |                       | 4   |                       | 34  |
| 43       | Larry men:                       | 1907  | 132                  | 84.0                              | .195                            | 16.41                              |                                                |                       |                  |    |                       |     |                       | 132 |
| 44       | 11 plants.....                   | 1908  | 86                   | 84.0                              | .184                            | 15.48                              |                                                |                       |                  |    |                       |     |                       | 86  |
| 45       |                                  | 1909  | 135                  | 84.0                              | .186                            | 15.64                              |                                                |                       |                  |    |                       |     |                       | 135 |
| 46       |                                  | 1910  | 149                  | 84.0                              | .202                            | 16.97                              |                                                |                       |                  |    |                       |     |                       | 149 |
| 47       | 21 plants.....                   | 1910  | 231                  | 84.0                              | .196                            | 16.47                              |                                                |                       |                  |    |                       |     |                       | 231 |
| 48       |                                  | 1911  | 203                  | 82.9                              | .194                            | 15.99                              |                                                |                       |                  |    |                       | 19  |                       | 184 |
| 49       |                                  | 1912  | 237                  | 78.1                              | .200                            | 15.48                              |                                                |                       | 36               |    |                       | 33  |                       | 168 |



# HOUR, AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, *BLAST FURNACES.*

years are for identical plants.]

| Employees whose rates of wages per hour were— |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |    | Line<br>No. |
|-----------------------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|----|-------------|
| 8<br>and<br>under<br>9<br>cts.                | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |    |             |
| -----                                         | -----                           | 27                               | 84                               | 127                              | 439                              | 10                               | 113                              | 24                               | -----                            | -----                            | -----                            | -----                            | -----                      | 1  |             |
| 3                                             | 20                              | 31                               | 37                               | 122                              | 191                              | 29                               | 40                               | -----                            | -----                            | -----                            | -----                            | -----                            | -----                      | 2  |             |
| 3                                             | 16                              | 62                               | 122                              | 133                              | 286                              | 48                               | 67                               | -----                            | -----                            | -----                            | -----                            | -----                            | -----                      | 3  |             |
| -----                                         | -----                           | 35                               | 164                              | 81                               | 397                              | 165                              | 62                               | -----                            | -----                            | -----                            | -----                            | -----                            | -----                      | 4  |             |
| -----                                         | -----                           | 44                               | 230                              | 294                              | 551                              | 221                              | 105                              | -----                            | -----                            | -----                            | -----                            | -----                            | -----                      | 5  |             |
| -----                                         | -----                           | 55                               | 85                               | 159                              | 380                              | 152                              | 27                               | 40                               | -----                            | -----                            | -----                            | -----                            | -----                      | 6  |             |
| -----                                         | -----                           | 46                               | 85                               | 159                              | 395                              | 152                              | 27                               | 40                               | -----                            | -----                            | -----                            | -----                            | -----                      | 7  |             |
| -----                                         | -----                           | 49                               | 53                               | 155                              | 487                              | 217                              | 37                               | 20                               | 27                               | -----                            | -----                            | -----                            | -----                      | 8  |             |
| -----                                         | -----                           | 83                               | 53                               | 162                              | 470                              | 217                              | 37                               | 20                               | 27                               | -----                            | -----                            | -----                            | -----                      | 9  |             |
| -----                                         | -----                           | 53                               | 61                               | 77                               | 97                               | 383                              | 446                              | 62                               | 8                                | -----                            | -----                            | -----                            | -----                      | 10 |             |
| -----                                         | -----                           | 31                               | 36                               | 90                               | 137                              | 449                              | 456                              | 62                               | 8                                | -----                            | -----                            | -----                            | -----                      | 11 |             |
| -----                                         | -----                           | 12                               | 21                               | 82                               | 141                              | 375                              | 348                              | 22                               | -----                            | -----                            | -----                            | -----                            | -----                      | 12 |             |
| -----                                         | -----                           | 31                               | 28                               | 86                               | 130                              | 390                              | 348                              | 18                               | -----                            | -----                            | -----                            | -----                            | -----                      | 13 |             |
| -----                                         | -----                           | 40                               | 28                               | 80                               | 99                               | 275                              | 321                              | 35                               | -----                            | -----                            | -----                            | -----                            | -----                      | 14 |             |
| -----                                         | -----                           | 36                               | 68                               | 32                               | 89                               | 68                               | -----                            | -----                            | -----                            | -----                            | -----                            | -----                            | -----                      | 15 |             |
| -----                                         | -----                           | 18                               | 60                               | 34                               | 42                               | 40                               | -----                            | -----                            | -----                            | -----                            | -----                            | -----                            | -----                      | 16 |             |
| -----                                         | -----                           | 60                               | 134                              | -----                            | 48                               | 40                               | -----                            | -----                            | -----                            | -----                            | -----                            | -----                            | -----                      | 17 |             |
| -----                                         | -----                           | -----                            | 87                               | 50                               | 80                               | 50                               | -----                            | -----                            | -----                            | -----                            | -----                            | -----                            | -----                      | 18 |             |
| -----                                         | -----                           | -----                            | 176                              | 320                              | 96                               | 80                               | -----                            | -----                            | -----                            | -----                            | -----                            | -----                            | -----                      | 19 |             |
| -----                                         | -----                           | -----                            | 137                              | 156                              | 34                               | 64                               | -----                            | -----                            | -----                            | -----                            | -----                            | -----                            | -----                      | 20 |             |
| -----                                         | -----                           | -----                            | 137                              | 174                              | 42                               | 64                               | -----                            | -----                            | -----                            | -----                            | -----                            | -----                            | -----                      | 21 |             |
| -----                                         | -----                           | -----                            | 129                              | 209                              | 54                               | 76                               | -----                            | -----                            | -----                            | -----                            | -----                            | -----                            | -----                      | 22 |             |
| -----                                         | -----                           | -----                            | 129                              | 142                              | 76                               | 76                               | -----                            | -----                            | -----                            | -----                            | -----                            | -----                            | -----                      | 23 |             |
| -----                                         | -----                           | -----                            | 95                               | 190                              | -----                            | 98                               | 78                               | -----                            | -----                            | -----                            | -----                            | -----                            | -----                      | 24 |             |
| -----                                         | -----                           | -----                            | 83                               | 160                              | 86                               | 58                               | 82                               | -----                            | -----                            | -----                            | -----                            | -----                            | -----                      | 25 |             |
| -----                                         | -----                           | -----                            | 58                               | 108                              | 102                              | 44                               | 48                               | -----                            | -----                            | -----                            | -----                            | -----                            | -----                      | 26 |             |
| -----                                         | -----                           | 2                                | 12                               | 22                               | 102                              | 42                               | 28                               | -----                            | -----                            | -----                            | -----                            | -----                            | -----                      | 27 |             |
| -----                                         | 2                               | 10                               | 2                                | 22                               | 36                               | 48                               | 28                               | -----                            | -----                            | -----                            | -----                            | -----                            | -----                      | 28 |             |
| -----                                         | -----                           | 4                                | 12                               | 8                                | 6                                | 10                               | 26                               | -----                            | -----                            | -----                            | -----                            | -----                            | -----                      | 29 |             |
| -----                                         | -----                           | 4                                | 14                               | -----                            | 6                                | 8                                | 12                               | -----                            | -----                            | -----                            | -----                            | -----                            | -----                      | 30 |             |
| -----                                         | -----                           | 6                                | 16                               | 10                               | 6                                | 12                               | 12                               | -----                            | -----                            | -----                            | -----                            | -----                            | -----                      | 31 |             |
| -----                                         | -----                           | -----                            | 4                                | 16                               | 4                                | 24                               | -----                            | -----                            | -----                            | -----                            | -----                            | -----                            | -----                      | 32 |             |
| -----                                         | -----                           | -----                            | 4                                | 37                               | 77                               | -----                            | 18                               | -----                            | 6                                | -----                            | -----                            | -----                            | -----                      | 33 |             |
| -----                                         | -----                           | 2                                | 14                               | 20                               | 28                               | 2                                | 12                               | -----                            | 6                                | -----                            | -----                            | -----                            | -----                      | 34 |             |
| -----                                         | -----                           | 2                                | 14                               | 20                               | 28                               | 10                               | 12                               | -----                            | 6                                | -----                            | -----                            | -----                            | -----                      | 35 |             |
| -----                                         | -----                           | 2                                | 10                               | 30                               | 14                               | 16                               | 18                               | -----                            | 6                                | -----                            | -----                            | -----                            | -----                      | 36 |             |
| -----                                         | -----                           | 4                                | 12                               | 26                               | 14                               | 16                               | 18                               | -----                            | 6                                | -----                            | -----                            | -----                            | -----                      | 37 |             |
| -----                                         | -----                           | 2                                | 6                                | 18                               | 14                               | 22                               | 30                               | -----                            | 6                                | -----                            | -----                            | -----                            | -----                      | 38 |             |
| -----                                         | -----                           | 2                                | 2                                | 8                                | 12                               | 14                               | 51                               | -----                            | 6                                | -----                            | -----                            | -----                            | -----                      | 39 |             |
| -----                                         | -----                           | 2                                | 2                                | 12                               | 4                                | 12                               | 42                               | -----                            | 6                                | -----                            | -----                            | -----                            | -----                      | 40 |             |
| -----                                         | -----                           | 2                                | 2                                | -----                            | -----                            | 8                                | 38                               | -----                            | 6                                | -----                            | -----                            | -----                            | -----                      | 41 |             |
| -----                                         | -----                           | 2                                | 2                                | -----                            | 2                                | 6                                | 26                               | -----                            | 6                                | -----                            | -----                            | -----                            | -----                      | 42 |             |
| -----                                         | -----                           | -----                            | 20                               | 4                                | 16                               | 16                               | 56                               | 20                               | -----                            | -----                            | -----                            | -----                            | -----                      | 43 |             |
| -----                                         | -----                           | 6                                | 16                               | -----                            | 8                                | 12                               | 44                               | -----                            | -----                            | -----                            | -----                            | -----                            | -----                      | 44 |             |
| -----                                         | -----                           | 6                                | 4                                | 26                               | -----                            | 68                               | 31                               | -----                            | -----                            | -----                            | -----                            | -----                            | -----                      | 45 |             |
| -----                                         | -----                           | 2                                | 2                                | 4                                | 24                               | 29                               | 67                               | 21                               | -----                            | -----                            | -----                            | -----                            | -----                      | 46 |             |
| -----                                         | -----                           | 2                                | 4                                | 4                                | 70                               | 49                               | 81                               | 21                               | -----                            | -----                            | -----                            | -----                            | -----                      | 47 |             |
| -----                                         | -----                           | 2                                | 2                                | 6                                | 70                               | 30                               | 76                               | 17                               | -----                            | -----                            | -----                            | -----                            | -----                      | 48 |             |
| -----                                         | -----                           | -----                            | 4                                | 6                                | 46                               | 42                               | 118                              | 21                               | -----                            | -----                            | -----                            | -----                            | -----                      | 49 |             |

TABLE A.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER BY YEARS, 1907 TO 1915—

| Line No. | Occupation and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |     |                      |       |
|----------|----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|-----|----------------------|-------|
|          |                                  |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72  | Over 72 and under 84 | 84    |
| 1        | Larry men—Concld.                | 1912  | 241                  | 78.2                              | \$0.199                         | \$15.46                            |                                                |                      | 36              |    |                      | 33  |                      | 172   |
| 2        | 23 plants.....                   | 1913  | 234                  | 82.3                              | .215                            | 17.60                              |                                                |                      |                 |    |                      | 34  |                      | 200   |
| 3        | 23 plants.....                   | 1913  | 238                  | 82.3                              | .217                            | 17.77                              |                                                |                      |                 |    |                      | 34  |                      | 204   |
| 4        |                                  | 1914  | 174                  | 78.6                              | .218                            | 17.10                              |                                                |                      |                 |    |                      | 74  | 8                    | 92    |
| 5        | 27 plants.....                   | 1914  | 192                  | 78.6                              | .215                            | 16.88                              |                                                |                      |                 |    |                      | 82  | 8                    | 102   |
| 6        |                                  | 1915  | 212                  | 78.6                              | .211                            | 16.51                              |                                                |                      |                 |    |                      | 92  | 8                    | 112   |
| 7        | Larry men's helpers:             | 1907  | 115                  | 84.0                              | .159                            | 13.35                              |                                                |                      |                 |    |                      |     |                      | 115   |
| 8        | 10 plants.....                   | 1908  | 79                   | 84.0                              | .152                            | 12.80                              |                                                |                      |                 |    |                      |     |                      | 79    |
| 9        |                                  | 1909  | 135                  | 84.0                              | .149                            | 12.53                              |                                                |                      |                 |    |                      |     |                      | 135   |
| 10       |                                  | 1910  | 134                  | 84.0                              | .163                            | 13.69                              |                                                |                      |                 |    |                      |     |                      | 134   |
| 11       | 19 plants.....                   | 1910  | 278                  | 84.0                              | .165                            | 13.88                              |                                                |                      |                 |    |                      |     |                      | 278   |
| 12       |                                  | 1911  | 294                  | 82.6                              | .168                            | 13.89                              |                                                |                      |                 |    |                      | 34  |                      | 260   |
| 13       |                                  | 1912  | 343                  | 79.6                              | .173                            | 13.67                              |                                                |                      | 36              |    |                      | 43  |                      | 264   |
| 14       | 23 plants.....                   | 1912  | 359                  | 79.6                              | .172                            | 13.64                              |                                                |                      | 36              |    |                      | 49  |                      | 274   |
| 15       |                                  | 1913  | 342                  | 82.6                              | .190                            | 15.69                              |                                                |                      |                 |    |                      | 40  |                      | 302   |
| 16       | 23 plants.....                   | 1913  | 352                  | 82.6                              | .191                            | 15.78                              |                                                |                      |                 |    |                      | 40  |                      | 312   |
| 17       |                                  | 1914  | 238                  | 78.5                              | .189                            | 14.79                              |                                                |                      |                 |    |                      | 104 | 8                    | 126   |
| 18       | 27 plants.....                   | 1914  | 250                  | 78.6                              | .187                            | 14.67                              |                                                |                      |                 |    |                      | 108 | 8                    | 134   |
| 19       |                                  | 1915  | 275                  | 78.3                              | .185                            | 14.43                              |                                                |                      |                 | 1  |                      | 126 | 8                    | 140   |
| 20       | Skip operators:                  | 1907  | 86                   | 84.0                              | .193                            | 16.19                              |                                                |                      |                 |    |                      |     |                      | 86    |
| 21       | 11 plants.....                   | 1908  | 64                   | 84.0                              | .184                            | 15.48                              |                                                |                      |                 |    |                      |     |                      | 64    |
| 22       |                                  | 1909  | 94                   | 84.0                              | .183                            | 15.40                              |                                                |                      |                 |    |                      |     |                      | 94    |
| 23       |                                  | 1910  | 97                   | 84.0                              | .196                            | 16.46                              |                                                |                      |                 |    |                      |     |                      | 97    |
| 24       | 19 plants.....                   | 1910  | 125                  | 84.0                              | .197                            | 16.56                              |                                                |                      |                 |    |                      |     |                      | 125   |
| 25       |                                  | 1911  | 124                  | 83.8                              | .198                            | 16.60                              |                                                |                      |                 |    |                      | 2   |                      | 122   |
| 26       |                                  | 1912  | 136                  | 79.2                              | .206                            | 16.14                              |                                                |                      | 18              |    |                      | 12  |                      | 106   |
| 27       | 20 plants.....                   | 1912  | 138                  | 79.3                              | .206                            | 16.19                              |                                                |                      | 18              |    |                      | 12  |                      | 108   |
| 28       |                                  | 1913  | 150                  | 82.9                              | .217                            | 17.95                              |                                                |                      |                 |    |                      | 14  |                      | 136   |
| 29       | 22 plants.....                   | 1913  | 158                  | 82.9                              | .217                            | 17.97                              |                                                |                      |                 |    |                      | 14  |                      | 144   |
| 30       |                                  | 1914  | 123                  | 79.5                              | .217                            | 17.26                              |                                                |                      |                 |    |                      | 42  | 8                    | 73    |
| 31       | 28 plants.....                   | 1914  | 139                  | 79.5                              | .214                            | 16.98                              |                                                |                      |                 |    |                      | 48  | 8                    | 83    |
| 32       |                                  | 1915  | 152                  | 79.4                              | .215                            | 17.03                              |                                                |                      |                 |    |                      | 54  | 8                    | 90    |
| 33       | Blowers:                         | 1907  | 78                   | 84.0                              | .300                            | 25.17                              |                                                |                      |                 |    |                      |     |                      | 78    |
| 34       | 18 plants.....                   | 1908  | 68                   | 84.0                              | .283                            | 23.74                              |                                                |                      |                 |    |                      |     |                      | 68    |
| 35       |                                  | 1909  | 86                   | 84.0                              | .286                            | 24.04                              |                                                |                      |                 |    |                      |     |                      | 86    |
| 36       |                                  | 1910  | 90                   | 84.0                              | .307                            | 25.80                              |                                                |                      |                 |    |                      |     |                      | 90    |
| 37       | 32 plants.....                   | 1910  | 131                  | 83.5                              | .296                            | 24.74                              |                                                |                      |                 | 3  |                      |     |                      | 128   |
| 38       |                                  | 1911  | 121                  | 82.9                              | .306                            | 25.24                              |                                                |                      |                 |    |                      | 11  |                      | 110   |
| 39       | 33 plants.....                   | 1911  | 123                  | 82.9                              | .305                            | 25.21                              |                                                |                      |                 |    |                      | 11  |                      | 112   |
| 40       |                                  | 1912  | 132                  | 80.2                              | .313                            | 24.84                              |                                                |                      | 9               |    |                      | 21  |                      | 102   |
| 41       | 34 plants.....                   | 1912  | 139                  | 80.3                              | .315                            | 25.01                              |                                                |                      | 9               |    |                      | 22  |                      | 108   |
| 42       |                                  | 1913  | 147                  | 82.0                              | .329                            | 26.84                              |                                                |                      |                 |    |                      | 25  |                      | 122   |
| 43       | 34 plants.....                   | 1913  | 154                  | 82.2                              | .332                            | 27.21                              |                                                |                      |                 |    |                      | 23  |                      | 131   |
| 44       |                                  | 1914  | 130                  | 80.5                              | .329                            | 26.42                              |                                                |                      |                 |    | 1                    | 34  | 7                    | 1 88  |
| 45       | 38 plants.....                   | 1914  | 143                  | 80.7                              | .333                            | 26.74                              |                                                |                      |                 |    | 1                    | 36  | 7                    | 1 99  |
| 46       |                                  | 1915  | 149                  | 80.6                              | .336                            | 26.93                              |                                                |                      |                 |    | 1                    | 38  | 7                    | 1 103 |
| 47       | Blowing engineers:               | 1907  | 100                  | 84.0                              | .242                            | 20.30                              |                                                |                      |                 |    |                      |     |                      | 100   |
| 48       | 20 plants.....                   | 1908  | 85                   | 84.0                              | .235                            | 19.77                              |                                                |                      |                 |    |                      |     |                      | 85    |
| 49       |                                  | 1909  | 103                  | 84.0                              | .230                            | 19.35                              |                                                |                      |                 |    |                      |     |                      | 103   |
| 50       |                                  | 1910  | 112                  | 84.0                              | .245                            | 20.59                              |                                                |                      |                 |    |                      |     |                      | 112   |

<sup>1</sup> Including 2 employees whose full-time hours per week were 91.

HOUR, AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES,  
*BLAST FURNACES*—Continued.

| Employees whose rates of wages per hour were— |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    | Line No. |
|-----------------------------------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-------------------|----|----------|
| 8 and under 9 cts.                            | 9 and under 10 cts. | 10 and under 12 cts. | 12 and under 14 cts. | 14 and under 16 cts. | 16 and under 18 cts. | 18 and under 20 cts. | 20 and under 25 cts. | 25 and under 30 cts. | 30 and under 40 cts. | 40 and under 50 cts. | 50 and under 60 cts. | 60 and under 70 cts. | 70 cts. and over. |    |          |
|                                               |                     |                      | 6                    | 6                    | 46                   | 42                   | 120                  | 21                   |                      |                      |                      |                      |                   | 1  |          |
|                                               |                     |                      | 6                    | 6                    | 4                    | 18                   | 164                  | 36                   |                      |                      |                      |                      |                   | 2  |          |
|                                               |                     |                      | 2                    | 6                    | 4                    | 18                   | 172                  | 36                   |                      |                      |                      |                      |                   | 3  |          |
|                                               |                     |                      | 2                    | 4                    | 2                    | 18                   | 122                  | 26                   |                      |                      |                      |                      |                   | 4  |          |
|                                               |                     |                      | 8                    | 4                    | 2                    | 22                   | 130                  | 26                   |                      |                      |                      |                      |                   | 5  |          |
|                                               |                     |                      | 16                   | 4                    | 6                    | 18                   | 138                  | 30                   |                      |                      |                      |                      |                   | 6  |          |
|                                               |                     | 8                    | 2                    | 34                   | 71                   |                      |                      |                      |                      |                      |                      |                      |                   | 7  |          |
|                                               | 10                  |                      |                      | 36                   | 33                   |                      |                      |                      |                      |                      |                      |                      |                   | 8  |          |
|                                               | 10                  |                      | 38                   | 41                   | 46                   |                      |                      |                      |                      |                      |                      |                      |                   | 9  |          |
|                                               | 8                   |                      |                      | 39                   | 67                   | 20                   |                      |                      |                      |                      |                      |                      |                   | 10 |          |
|                                               |                     | 12                   | 2                    | 66                   | 178                  | 20                   |                      |                      |                      |                      |                      |                      |                   | 11 |          |
|                                               |                     | 2                    | 12                   | 46                   | 214                  | 20                   |                      |                      |                      |                      |                      |                      |                   | 12 |          |
|                                               |                     |                      | 14                   | 18                   | 255                  | 20                   | 36                   |                      |                      |                      |                      |                      |                   | 13 |          |
|                                               |                     |                      |                      | 16                   | 20                   | 263                  | 24                   | 36                   |                      |                      |                      |                      |                   | 14 |          |
|                                               |                     |                      |                      | 16                   | 4                    | 28                   | 143                  | 151                  |                      |                      |                      |                      |                   | 15 |          |
|                                               |                     |                      |                      | 12                   | 4                    | 26                   | 162                  | 148                  |                      |                      |                      |                      |                   | 16 |          |
|                                               |                     |                      | 10                   | 4                    | 20                   | 130                  | 74                   |                      |                      |                      |                      |                      |                   | 17 |          |
|                                               |                     | 6                    | 8                    | 6                    | 22                   | 134                  | 74                   |                      |                      |                      |                      |                      |                   | 18 |          |
|                                               | 14                  |                      | 8                    | 6                    | 30                   | 119                  | 98                   |                      |                      |                      |                      |                      |                   | 19 |          |
|                                               |                     |                      |                      | 10                   | 24                   | 4                    | 46                   | 2                    |                      |                      |                      |                      |                   | 20 |          |
|                                               |                     |                      |                      | 6                    | 16                   | 6                    | 28                   | 2                    |                      |                      |                      |                      |                   | 21 |          |
|                                               |                     |                      |                      | 8                    | 28                   | 40                   | 16                   | 2                    |                      |                      |                      |                      |                   | 22 |          |
|                                               |                     |                      |                      | 8                    | 31                   | 8                    | 48                   | 2                    |                      |                      |                      |                      |                   | 23 |          |
|                                               |                     |                      |                      | 10                   | 35                   | 14                   | 60                   | 6                    |                      |                      |                      |                      |                   | 24 |          |
|                                               |                     |                      |                      | 8                    | 34                   | 2                    | 70                   | 10                   |                      |                      |                      |                      |                   | 25 |          |
|                                               |                     |                      |                      | 8                    | 38                   | 6                    | 54                   | 30                   |                      |                      |                      |                      |                   | 26 |          |
|                                               |                     |                      |                      | 8                    | 38                   | 6                    | 56                   | 30                   |                      |                      |                      |                      |                   | 27 |          |
|                                               |                     |                      |                      | 8                    | 6                    | 14                   | 110                  | 12                   |                      |                      |                      |                      |                   | 28 |          |
|                                               |                     |                      |                      | 8                    | 6                    | 14                   | 118                  | 12                   |                      |                      |                      |                      |                   | 29 |          |
|                                               |                     |                      |                      | 6                    | 6                    | 14                   | 84                   | 13                   |                      |                      |                      |                      |                   | 30 |          |
|                                               |                     |                      | 4                    | 6                    | 6                    | 18                   | 92                   | 13                   |                      |                      |                      |                      |                   | 31 |          |
|                                               |                     |                      | 4                    | 6                    | 8                    | 22                   | 100                  | 12                   |                      |                      |                      |                      |                   | 32 |          |
|                                               |                     |                      |                      |                      |                      |                      | 10                   | 22                   | 41                   | 5                    |                      |                      |                   | 33 |          |
|                                               |                     |                      |                      |                      |                      |                      | 12                   | 30                   | 26                   |                      |                      |                      |                   | 34 |          |
|                                               |                     |                      |                      |                      |                      |                      | 20                   | 33                   | 33                   |                      |                      |                      |                   | 35 |          |
|                                               |                     |                      |                      |                      |                      |                      | 11                   | 33                   | 44                   | 2                    |                      |                      |                   | 36 |          |
|                                               |                     |                      |                      | 1                    |                      |                      | 27                   | 45                   | 55                   | 3                    |                      |                      |                   | 37 |          |
|                                               |                     |                      |                      |                      | 2                    |                      | 24                   | 33                   | 50                   | 12                   |                      |                      |                   | 38 |          |
|                                               |                     |                      |                      |                      | 2                    |                      | 24                   | 35                   | 50                   | 12                   |                      |                      |                   | 39 |          |
|                                               |                     |                      |                      |                      | 2                    |                      | 21                   | 38                   | 53                   | 18                   |                      |                      |                   | 40 |          |
|                                               |                     |                      |                      |                      | 2                    |                      | 23                   | 38                   | 56                   | 20                   |                      |                      |                   | 41 |          |
|                                               |                     |                      |                      |                      |                      | 2                    | 22                   | 24                   | 80                   | 15                   | 4                    |                      |                   | 42 |          |
|                                               |                     |                      |                      |                      |                      | 2                    | 17                   | 28                   | 88                   | 15                   |                      | 4                    |                   | 43 |          |
|                                               |                     |                      |                      |                      |                      | 2                    | 14                   | 16                   | 81                   | 17                   |                      |                      |                   | 44 |          |
|                                               |                     |                      |                      |                      |                      | 2                    | 12                   | 22                   | 84                   | 23                   |                      |                      |                   | 45 |          |
|                                               |                     |                      |                      |                      |                      |                      | 22                   | 19                   | 78                   | 30                   |                      |                      |                   | 46 |          |
|                                               |                     |                      |                      | 2                    | 6                    | 12                   | 12                   | 65                   | 3                    |                      |                      |                      |                   | 47 |          |
|                                               |                     |                      |                      | 4                    | 4                    | 6                    | 30                   | 41                   |                      |                      |                      |                      |                   | 48 |          |
|                                               |                     |                      |                      | 4                    | 6                    | 12                   | 42                   | 39                   |                      |                      |                      |                      |                   | 49 |          |
|                                               |                     |                      |                      | 2                    | 6                    | 8                    | 42                   | 46                   | 8                    |                      |                      |                      |                   | 50 |          |

TABLE A.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER BY YEARS, 1907 TO 1915—

| Line No. | Occupation and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |     |
|----------|----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|-----|
|          |                                  |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84  |
| 1        | Blowing engineers—               |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |     |
| 2        | Concluded.                       |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |     |
| 3        | 34 plants.....                   | 1910  | 153                  | 84.0                              | \$0.243                         | \$20.39                            |                                                |                      |                 |    |                      |    |                      | 153 |
| 4        |                                  | 1911  | 135                  | 83.0                              | .244                            | 20.20                              |                                                |                      |                 |    |                      | 11 |                      | 124 |
| 5        | 35 plants.....                   | 1911  | 137                  | 82.9                              | .244                            | 20.15                              |                                                |                      |                 |    |                      | 13 |                      | 124 |
| 6        |                                  | 1912  | 142                  | 80.6                              | .249                            | 19.93                              |                                                |                      | 6               |    |                      | 26 |                      | 110 |
| 7        | 35 plants.....                   | 1912  | 142                  | 80.6                              | .249                            | 19.93                              |                                                |                      | 6               |    |                      | 26 |                      | 110 |
| 8        |                                  | 1913  | 148                  | 81.6                              | .263                            | 21.37                              |                                                |                      |                 |    |                      | 30 |                      | 118 |
| 9        | 35 plants.....                   | 1913  | 156                  | 82.0                              | .260                            | 21.28                              |                                                |                      |                 |    |                      | 26 |                      | 130 |
| 10       |                                  | 1914  | 139                  | 79.2                              | .259                            | 20.42                              |                                                |                      |                 |    |                      | 52 |                      | 178 |
| 11       | 38 plants.....                   | 1914  | 147                  | 79.3                              | .262                            | 20.64                              |                                                |                      |                 |    |                      | 54 |                      | 184 |
| 12       | Blowing engineers'               | 1915  | 153                  | 79.1                              | .262                            | 20.64                              |                                                |                      |                 |    |                      | 59 |                      | 185 |
| 13       | assistants:                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |     |
| 14       | 11 plants.....                   | 1907  | 67                   | 84.0                              | .203                            | 17.02                              |                                                |                      |                 |    |                      |    |                      | 67  |
| 15       |                                  | 1908  | 51                   | 84.0                              | .199                            | 16.72                              |                                                |                      |                 |    |                      |    |                      | 51  |
| 16       |                                  | 1909  | 74                   | 84.0                              | .191                            | 16.08                              |                                                |                      |                 |    |                      |    |                      | 74  |
| 17       |                                  | 1910  | 66                   | 84.0                              | .208                            | 17.48                              |                                                |                      |                 |    |                      |    |                      | 66  |
| 18       | 18 plants.....                   | 1910  | 94                   | 84.0                              | .207                            | 17.38                              |                                                |                      |                 |    |                      |    |                      | 94  |
| 19       |                                  | 1911  | 91                   | 83.2                              | .205                            | 17.06                              |                                                |                      |                 |    |                      | 6  |                      | 85  |
| 20       |                                  | 1912  | 108                  | 80.4                              | .211                            | 16.85                              |                                                |                      | 9               |    |                      | 11 |                      | 88  |
| 21       | 18 plants.....                   | 1912  | 106                  | 80.8                              | .213                            | 17.13                              |                                                |                      | 9               |    |                      | 7  |                      | 90  |
| 22       |                                  | 1913  | 94                   | 83.2                              | .225                            | 18.67                              |                                                |                      |                 |    |                      | 6  |                      | 88  |
| 23       | 18 plants.....                   | 1913  | 87                   | 79.1                              | .224                            | 17.68                              |                                                |                      |                 |    |                      | 30 | 12                   | 45  |
| 24       | 21 plants.....                   | 1914  | 99                   | 79.0                              | .223                            | 17.57                              |                                                |                      |                 |    |                      | 36 | 12                   | 51  |
| 25       | Stove tenders:                   | 1915  | 96                   | 78.3                              | .223                            | 17.41                              |                                                |                      |                 |    |                      | 40 | 12                   | 44  |
| 26       | 20 plants.....                   | 1907  | 140                  | 84.0                              | .192                            | 16.10                              |                                                |                      |                 |    |                      |    |                      | 140 |
| 27       |                                  | 1908  | 96                   | 84.0                              | .185                            | 15.52                              |                                                |                      |                 |    |                      |    |                      | 96  |
| 28       |                                  | 1909  | 140                  | 84.0                              | .181                            | 15.22                              |                                                |                      |                 |    |                      |    |                      | 140 |
| 29       |                                  | 1910  | 146                  | 84.0                              | .197                            | 16.55                              |                                                |                      |                 |    |                      |    |                      | 146 |
| 30       | 34 plants.....                   | 1910  | 200                  | 84.0                              | .193                            | 16.21                              |                                                |                      |                 |    |                      |    |                      | 200 |
| 31       |                                  | 1911  | 178                  | 82.7                              | .190                            | 15.69                              |                                                |                      |                 |    |                      | 20 |                      | 158 |
| 32       | 35 plants.....                   | 1911  | 180                  | 82.7                              | .190                            | 15.68                              |                                                |                      |                 |    |                      | 20 |                      | 160 |
| 33       |                                  | 1912  | 212                  | 79.5                              | .195                            | 15.42                              |                                                |                      | 18              |    |                      | 38 |                      | 156 |
| 34       | 36 plants.....                   | 1912  | 214                  | 79.5                              | .195                            | 15.38                              |                                                |                      | 18              |    |                      | 38 |                      | 158 |
| 35       |                                  | 1913  | 213                  | 81.8                              | .211                            | 17.24                              |                                                |                      |                 |    |                      | 39 |                      | 174 |
| 36       | 35 plants.....                   | 1913  | 220                  | 81.9                              | .211                            | 17.30                              |                                                |                      |                 |    |                      | 38 |                      | 182 |
| 37       |                                  | 1914  | 177                  | 79.6                              | .209                            | 16.54                              |                                                |                      |                 |    |                      | 60 | 12                   | 105 |
| 38       | 38 plants.....                   | 1914  | 183                  | 79.7                              | .209                            | 16.56                              |                                                |                      |                 |    |                      | 60 | 12                   | 111 |
| 39       | Keepers:                         | 1915  | 186                  | 79.4                              | .208                            | 16.46                              |                                                |                      |                 |    |                      | 66 | 12                   | 108 |
| 40       | 20 plants.....                   | 1907  | 146                  | 84.0                              | .218                            | 18.34                              |                                                |                      |                 |    |                      |    |                      | 146 |
| 41       |                                  | 1908  | 96                   | 84.0                              | .210                            | 17.68                              |                                                |                      |                 |    |                      |    |                      | 96  |
| 42       |                                  | 1909  | 141                  | 84.0                              | .205                            | 17.26                              |                                                |                      |                 |    |                      |    |                      | 141 |
| 43       |                                  | 1910  | 142                  | 84.0                              | .219                            | 18.43                              |                                                |                      |                 |    |                      |    |                      | 142 |
| 44       | 34 plants.....                   | 1910  | 201                  | 84.0                              | .215                            | 18.09                              |                                                |                      |                 |    |                      |    |                      | 201 |
| 45       |                                  | 1911  | 182                  | 82.7                              | .217                            | 17.95                              |                                                |                      |                 |    |                      | 20 |                      | 162 |
| 46       | 35 plants.....                   | 1911  | 184                  | 82.7                              | .217                            | 17.95                              |                                                |                      |                 |    |                      | 20 |                      | 164 |
| 47       |                                  | 1912  | 216                  | 79.6                              | .223                            | 17.61                              |                                                |                      | 18              |    |                      | 38 |                      | 160 |
|          | 36 plants.....                   | 1912  | 218                  | 79.6                              | .223                            | 17.59                              |                                                |                      | 18              |    |                      | 38 |                      | 162 |
|          |                                  | 1913  | 224                  | 81.9                              | .234                            | 19.13                              |                                                |                      |                 |    |                      | 40 |                      | 184 |

<sup>1</sup> Including 1 employee whose full-time hours per week were 91.

HOUR, AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES,  
*BLAST FURNACES—Continued.*

| Employees whose rates of wages per hour were— |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    | Line No. |
|-----------------------------------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-------------------|----|----------|
| 8 and under 9 cts.                            | 9 and under 10 cts. | 10 and under 12 cts. | 12 and under 14 cts. | 14 and under 16 cts. | 16 and under 18 cts. | 18 and under 20 cts. | 20 and under 25 cts. | 25 and under 30 cts. | 30 and under 40 cts. | 40 and under 50 cts. | 50 and under 60 cts. | 60 and under 70 cts. | 70 cts. and over. |    |          |
|                                               |                     |                      |                      | 2                    | 14                   | 15                   | 45                   | 69                   | 8                    |                      |                      |                      |                   | 1  |          |
|                                               |                     |                      |                      | 2                    | 10                   | 14                   | 40                   | 61                   | 8                    |                      |                      |                      |                   | 2  |          |
|                                               |                     |                      |                      | 2                    | 10                   | 14                   | 42                   | 61                   | 8                    |                      |                      |                      |                   | 3  |          |
|                                               |                     |                      |                      | 2                    | 10                   | 20                   | 31                   | 63                   | 16                   |                      |                      |                      |                   | 4  |          |
|                                               |                     |                      |                      | 2                    | 10                   | 20                   | 31                   | 63                   | 16                   |                      |                      |                      |                   | 5  |          |
|                                               |                     |                      |                      | 2                    |                      | 24                   | 31                   | 51                   | 38                   | 2                    |                      |                      |                   | 6  |          |
|                                               |                     |                      |                      | 2                    |                      | 24                   | 35                   | 57                   | 38                   |                      |                      |                      |                   | 7  |          |
|                                               |                     |                      |                      | 2                    | 1                    | 18                   | 41                   | 45                   | 32                   |                      |                      |                      |                   | 8  |          |
|                                               |                     |                      |                      |                      | 5                    | 16                   | 43                   | 45                   | 38                   |                      |                      |                      |                   | 9  |          |
|                                               |                     |                      |                      |                      | 7                    | 14                   | 40                   | 53                   | 39                   |                      |                      |                      |                   | 10 |          |
|                                               |                     |                      | 4                    | 2                    | 2                    | 16                   | 33                   | 10                   |                      |                      |                      |                      |                   | 11 |          |
|                                               |                     | 2                    | 4                    | 2                    |                      | 12                   | 23                   | 8                    |                      |                      |                      |                      |                   | 12 |          |
|                                               | 6                   |                      | 2                    | 4                    | 4                    | 26                   | 22                   | 10                   |                      |                      |                      |                      |                   | 13 |          |
|                                               |                     |                      | 2                    | 4                    | 2                    | 12                   | 36                   | 10                   |                      |                      |                      |                      |                   | 14 |          |
|                                               |                     |                      | 2                    | 6                    | 3                    | 17                   | 56                   | 10                   |                      |                      |                      |                      |                   | 15 |          |
|                                               |                     |                      | 2                    | 6                    | 2                    | 19                   | 58                   | 4                    |                      |                      |                      |                      |                   | 16 |          |
|                                               |                     |                      | 4                    | 4                    | 4                    | 16                   | 72                   | 8                    |                      |                      |                      |                      |                   | 17 |          |
|                                               |                     |                      |                      | 4                    | 4                    | 16                   | 74                   | 8                    |                      |                      |                      |                      |                   | 18 |          |
|                                               |                     |                      |                      | 4                    | 4                    | 2                    | 62                   | 18                   | 4                    |                      |                      |                      |                   | 19 |          |
|                                               |                     |                      |                      | 4                    | 4                    | 2                    | 62                   | 18                   | 4                    |                      |                      |                      |                   | 20 |          |
|                                               |                     |                      |                      | 4                    | 6                    |                      | 55                   | 20                   | 2                    |                      |                      |                      |                   | 21 |          |
|                                               |                     |                      | 2                    | 4                    | 12                   |                      | 53                   | 24                   | 4                    |                      |                      |                      |                   | 22 |          |
|                                               |                     |                      | 2                    | 8                    | 8                    |                      | 49                   | 24                   | 5                    |                      |                      |                      |                   | 23 |          |
|                                               |                     |                      | 4                    | 16                   | 9                    | 73                   | 26                   | 12                   |                      |                      |                      |                      |                   | 24 |          |
|                                               |                     |                      | 8                    | 8                    | 4                    | 36                   | 38                   |                      |                      |                      |                      |                      |                   | 25 |          |
|                                               |                     |                      | 12                   | 17                   | 14                   | 52                   | 43                   |                      |                      |                      |                      |                      |                   | 26 |          |
|                                               |                     |                      | 4                    | 12                   | 18                   | 28                   | 84                   |                      |                      |                      |                      |                      |                   | 27 |          |
|                                               |                     |                      | 6                    | 22                   | 32                   | 36                   | 104                  |                      |                      |                      |                      |                      |                   | 28 |          |
|                                               |                     |                      | 6                    | 22                   | 22                   | 40                   | 88                   |                      |                      |                      |                      |                      |                   | 29 |          |
|                                               |                     |                      | 6                    | 22                   | 24                   | 40                   | 88                   |                      |                      |                      |                      |                      |                   | 30 |          |
|                                               |                     |                      | 6                    | 22                   | 30                   | 30                   | 124                  |                      |                      |                      |                      |                      |                   | 31 |          |
|                                               |                     |                      | 8                    | 22                   | 30                   | 30                   | 124                  |                      |                      |                      |                      |                      |                   | 32 |          |
|                                               |                     |                      | 6                    | 10                   | 29                   | 5                    | 163                  |                      |                      |                      |                      |                      |                   | 33 |          |
|                                               |                     |                      | 4                    | 10                   | 28                   | 9                    | 169                  |                      |                      |                      |                      |                      |                   | 34 |          |
|                                               |                     |                      | 4                    | 8                    | 22                   | 10                   | 133                  |                      |                      |                      |                      |                      |                   | 35 |          |
|                                               |                     |                      |                      | 10                   | 19                   | 12                   | 138                  |                      |                      |                      |                      |                      |                   | 36 |          |
|                                               |                     | 2                    | 8                    | 10                   | 13                   | 12                   | 141                  |                      |                      |                      |                      |                      |                   | 37 |          |
|                                               |                     |                      |                      | 18                   | 8                    | 2                    | 94                   | 24                   |                      |                      |                      |                      |                   | 38 |          |
|                                               |                     |                      | 6                    | 8                    | 6                    |                      | 72                   | 4                    |                      |                      |                      |                      |                   | 39 |          |
|                                               |                     |                      | 10                   | 14                   | 4                    | 4                    | 105                  | 4                    |                      |                      |                      |                      |                   | 40 |          |
|                                               |                     |                      |                      | 11                   | 2                    | 16                   | 107                  | 6                    |                      |                      |                      |                      |                   | 41 |          |
|                                               |                     |                      |                      | 19                   | 4                    | 37                   | 135                  | 6                    |                      |                      |                      |                      |                   | 42 |          |
|                                               |                     |                      |                      | 18                   | 4                    | 28                   | 128                  | 4                    |                      |                      |                      |                      |                   | 43 |          |
|                                               |                     |                      |                      | 18                   | 4                    | 28                   | 130                  | 4                    |                      |                      |                      |                      |                   | 44 |          |
|                                               |                     |                      |                      | 14                   | 12                   | 29                   | 137                  | 24                   |                      |                      |                      |                      |                   | 45 |          |
|                                               |                     |                      |                      |                      | 14                   | 12                   | 31                   | 137                  | 24                   |                      |                      |                      |                   | 46 |          |
|                                               |                     |                      |                      | 8                    | 12                   | 32                   | 66                   | 106                  |                      |                      |                      |                      |                   | 47 |          |

TABLE A.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER BY YEARS, 1907 TO 1915—

| Line No. | Occupation and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |     |                      |     |
|----------|----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|-----|----------------------|-----|
|          |                                  |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72  | Over 72 and under 84 | 84  |
| 1        | Keepers—Concluded.               | 1913  | 230                  | 82.0                              | \$0.235                         | \$19.28                            |                                                |                      |                 |    |                      | 38  |                      | 192 |
| 2        | 35 plants.....                   | 1914  | 178                  | 79.6                              | .233                            | 18.52                              |                                                |                      |                 |    |                      | 60  | 12                   | 106 |
| 3        | 38 plants.....                   | 1914  | 184                  | 79.6                              | .233                            | 18.47                              |                                                |                      |                 |    |                      | 62  | 12                   | 110 |
| 4        | 1915                             | 187   | 79.4                 | .232                              | 18.33                           |                                    |                                                |                      |                 |    |                      | 66  | 12                   | 109 |
| 5        | Keeper's helpers:                |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |     |
| 6        | 20 plants.....                   | 1907  | 616                  | 84.0                              | .165                            | 13.89                              |                                                |                      |                 |    |                      |     |                      | 616 |
| 7        |                                  | 1908  | 409                  | 84.0                              | .160                            | 13.41                              |                                                |                      |                 |    |                      |     |                      | 409 |
| 8        |                                  | 1909  | 596                  | 84.0                              | .155                            | 13.04                              |                                                |                      |                 |    |                      |     |                      | 596 |
| 9        |                                  | 1910  | 608                  | 84.0                              | .169                            | 14.22                              |                                                |                      |                 |    |                      |     |                      | 608 |
| 10       | 34 plants.....                   | 1910  | 877                  | 84.0                              | .168                            | 14.13                              |                                                |                      |                 |    |                      |     |                      | 877 |
| 11       |                                  | 1911  | 734                  | 83.1                              | .167                            | 13.83                              |                                                |                      |                 |    |                      | 56  |                      | 678 |
| 12       | 35 plants.....                   | 1911  | 742                  | 83.1                              | .167                            | 13.84                              |                                                |                      |                 |    |                      | 56  |                      | 686 |
| 13       |                                  | 1912  | 846                  | 81.0                              | .170                            | 13.74                              |                                                |                      | 36              |    |                      | 126 |                      | 684 |
| 14       | 36 plants.....                   | 1912  | 870                  | 80.2                              | .173                            | 13.75                              |                                                |                      | 66              |    |                      | 122 |                      | 682 |
| 15       |                                  | 1913  | 902                  | 82.2                              | .186                            | 15.30                              |                                                |                      |                 |    |                      | 136 |                      | 706 |
| 16       | 35 plants.....                   | 1913  | 950                  | 82.2                              | .186                            | 15.31                              |                                                |                      |                 |    |                      | 144 |                      | 806 |
| 17       |                                  | 1914  | 695                  | 80.4                              | .180                            | 14.87                              |                                                |                      |                 |    |                      | 200 | 48                   | 447 |
| 18       | 38 plants.....                   | 1914  | 734                  | 80.6                              | .185                            | 14.83                              |                                                |                      |                 |    |                      | 202 | 48                   | 484 |
| 19       | Iron handlers and loaders:       | 1915  | 727                  | 80.1                              | .182                            | 14.48                              |                                                |                      |                 |    |                      | 218 | 36                   | 473 |
| 20       | 9 plants.....                    | 1907  | 203                  | 73.2                              | .193                            | 14.20                              |                                                |                      |                 |    | 122                  |     | 12                   | 69  |
| 21       |                                  | 1908  | 163                  | 73.0                              | .190                            | 13.95                              |                                                |                      |                 |    | 97                   |     | 14                   | 52  |
| 22       |                                  | 1909  | 242                  | 73.6                              | .177                            | 13.05                              |                                                |                      |                 |    | 138                  |     | 18                   | 86  |
| 23       |                                  | 1910  | 177                  | 73.0                              | .195                            | 14.24                              |                                                |                      |                 |    | 105                  |     | 18                   | 54  |
| 24       | 18 plants.....                   | 1910  | 305                  | 74.2                              | .194                            | 14.36                              |                                                |                      |                 |    | 179                  |     | 18                   | 108 |
| 25       |                                  | 1911  | 300                  | 72.7                              | .195                            | 14.11                              |                                                |                      |                 | 4  | 189                  |     | 18                   | 89  |
| 26       | 19 plants.....                   | 1911  | 308                  | 73.0                              | .195                            | 14.17                              |                                                |                      |                 | 4  | 189                  |     | 18                   | 97  |
| 27       |                                  | 1912  | 359                  | 72.2                              | .195                            | 14.04                              |                                                |                      |                 | 28 | 179                  | 36  | 18                   | 98  |
| 28       | 19 plants.....                   | 1912  | 406                  | 73.1                              | .206                            | 15.11                              |                                                |                      |                 | 24 | 198                  | 36  | 18                   | 130 |
| 29       |                                  | 1913  | 446                  | 72.5                              | .220                            | 16.07                              |                                                |                      | 10              | 35 | 211                  | 41  | 18                   | 131 |
| 30       | 16 plants.....                   | 1913  | 398                  | 72.0                              | .227                            | 16.54                              |                                                |                      | 20              | 42 | 172                  | 32  | 18                   | 114 |
| 31       |                                  | 1914  | 333                  | 71.5                              | .222                            | 16.09                              | 18                                             |                      | 13              | 37 | 123                  | 28  |                      | 114 |
| 32       | 16 plants.....                   | 1914  | 305                  | 73.8                              | .218                            | 16.16                              | 9                                              |                      |                 | 10 | 157                  | 8   |                      | 121 |
| 33       | Pig-machine men:                 | 1915  | 323                  | 74.0                              | .204                            | 15.22                              |                                                |                      | 8               | 11 | 171                  | 8   |                      | 125 |
| 34       | 9 plants.....                    | 1907  | 193                  | 84.0                              | .167                            | 14.03                              |                                                |                      |                 |    |                      |     |                      | 193 |
| 35       |                                  | 1908  | 157                  | 83.9                              | .163                            | 13.69                              |                                                |                      |                 |    |                      |     | 3                    | 154 |
| 36       |                                  | 1909  | 152                  | 83.9                              | .162                            | 13.57                              |                                                |                      |                 |    |                      |     | 3                    | 149 |
| 37       |                                  | 1910  | 182                  | 83.8                              | .170                            | 14.27                              |                                                |                      |                 | 1  | 1                    |     |                      | 180 |
| 38       | 16 plants.....                   | 1910  | 291                  | 83.9                              | .169                            | 14.14                              |                                                |                      |                 | 1  | 1                    |     |                      | 289 |
| 39       |                                  | 1911  | 259                  | 82.4                              | .169                            | 13.90                              |                                                |                      |                 | 1  |                      | 33  |                      | 225 |
| 40       | 17 plants.....                   | 1911  | 267                  | 82.4                              | .169                            | 13.98                              |                                                |                      |                 | 1  |                      | 33  |                      | 233 |
| 41       |                                  | 1912  | 275                  | 81.9                              | .171                            | 13.97                              |                                                |                      |                 | 1  |                      | 47  |                      | 227 |
| 42       |                                  | 1913  | 290                  | 81.8                              | .192                            | 15.69                              |                                                |                      |                 | 1  |                      | 50  |                      | 239 |
| 43       | 19 plants.....                   | 1913  | 303                  | 81.9                              | .192                            | 15.72                              |                                                |                      |                 | 1  |                      | 50  |                      | 252 |
| 44       |                                  | 1914  | 235                  | 79.4                              | .192                            | 15.25                              |                                                |                      |                 | 1  |                      | 78  | 22                   | 135 |
| 45       | 21 plants.....                   | 1914  | 259                  | 79.2                              | .192                            | 15.15                              |                                                |                      |                 | 1  |                      | 93  | 22                   | 143 |
| 46       | Cinder men:                      | 1915  | 245                  | 79.6                              | .190                            | 15.07                              |                                                |                      |                 | 1  | 2                    | 79  | 17                   | 146 |
| 47       | 20 plants.....                   | 1907  | 262                  | 83.6                              | .173                            | 14.46                              |                                                |                      |                 |    | 4                    |     | 27                   | 231 |
| 48       |                                  | 1908  | 245                  | 82.6                              | .156                            | 12.88                              |                                                |                      |                 |    | 20                   |     | 24                   | 201 |
| 49       |                                  | 1909  | 380                  | 82.2                              | .150                            | 12.34                              |                                                |                      |                 |    | 3                    | 33  | 48                   | 296 |
| 50       |                                  | 1910  | 357                  | 82.9                              | .166                            | 13.78                              |                                                |                      |                 |    | 1                    | 24  | 20                   | 312 |

<sup>1</sup> Including 1 employee whose full-time hours per week were 91.

HOUR, AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES,  
*BLAST FURNACES*—Continued.

| Employees whose rates of wages per hour were— |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 8<br>and<br>under<br>9<br>cts.                | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                 |                                  |                                  | 8                                | 8                                | 30                               | 72                               | 112                              |                                  |                                  |                                  |                                  |                            | 1           |
|                                               |                                 |                                  |                                  | 6                                | 12                               | 17                               | 53                               | 90                               |                                  |                                  |                                  |                                  |                            | 2           |
|                                               |                                 |                                  | 2                                | 8                                | 8                                | 17                               | 59                               | 90                               |                                  |                                  |                                  |                                  |                            | 3           |
|                                               |                                 |                                  | 2                                | 14                               | 6                                | 19                               | 50                               | 96                               |                                  |                                  |                                  |                                  |                            | 4           |
|                                               |                                 | 48                               | 94                               | 46                               | 216                              | 116                              | 96                               |                                  |                                  |                                  |                                  |                                  |                            | 5           |
|                                               |                                 | 48                               | 68                               | 16                               | 161                              | 88                               | 28                               |                                  |                                  |                                  |                                  |                                  |                            | 6           |
|                                               |                                 | 90                               | 101                              | 54                               | 211                              | 120                              | 20                               |                                  |                                  |                                  |                                  |                                  |                            | 7           |
|                                               |                                 | 38                               | 57                               | 83                               | 188                              | 192                              | 50                               |                                  |                                  |                                  |                                  |                                  |                            | 8           |
|                                               |                                 | 38                               | 105                              | 149                              | 269                              | 244                              | 72                               |                                  |                                  |                                  |                                  |                                  |                            | 9           |
|                                               |                                 | 60                               | 92                               | 96                               | 196                              | 234                              | 56                               |                                  |                                  |                                  |                                  |                                  |                            | 10          |
|                                               |                                 | 60                               | 92                               | 96                               | 198                              | 240                              | 56                               |                                  |                                  |                                  |                                  |                                  |                            | 11          |
|                                               |                                 | 62                               | 76                               | 138                              | 192                              | 279                              | 99                               |                                  |                                  |                                  |                                  |                                  |                            | 12          |
|                                               |                                 | 40                               | 86                               | 140                              | 196                              | 279                              | 129                              |                                  |                                  |                                  |                                  |                                  |                            | 13          |
|                                               |                                 | 40                               | 36                               | 124                              | 110                              | 78                               | 514                              |                                  |                                  |                                  |                                  |                                  |                            | 14          |
|                                               |                                 | 58                               | 28                               | 118                              | 114                              | 84                               | 548                              |                                  |                                  |                                  |                                  |                                  |                            | 15          |
|                                               |                                 | 43                               | 26                               | 68                               | 106                              | 58                               | 394                              |                                  |                                  |                                  |                                  |                                  |                            | 16          |
|                                               |                                 | 59                               | 36                               | 51                               | 112                              | 58                               | 418                              |                                  |                                  |                                  |                                  |                                  |                            | 17          |
|                                               |                                 | 66                               | 68                               | 65                               | 72                               | 56                               | 400                              |                                  |                                  |                                  |                                  |                                  |                            | 18          |
|                                               |                                 |                                  | 10                               | 26                               | 86                               | 18                               | 51                               |                                  |                                  | 12                               |                                  |                                  |                            | 19          |
|                                               |                                 | 3                                | 23                               | 27                               | 45                               | 6                                | 40                               | 5                                | 14                               |                                  |                                  |                                  |                            | 20          |
|                                               |                                 |                                  | 28                               | 47                               | 86                               | 13                               | 50                               | 18                               |                                  |                                  |                                  |                                  |                            | 21          |
|                                               |                                 |                                  | 17                               | 19                               | 68                               | 12                               | 33                               | 28                               |                                  |                                  |                                  |                                  |                            | 22          |
|                                               |                                 |                                  | 24                               | 32                               | 129                              | 22                               | 54                               | 36                               | 8                                |                                  |                                  |                                  |                            | 23          |
|                                               |                                 |                                  | 21                               | 33                               | 98                               | 30                               | 75                               | 22                               | 21                               |                                  |                                  |                                  |                            | 24          |
|                                               |                                 |                                  | 21                               | 33                               | 98                               | 38                               | 75                               | 22                               | 21                               |                                  |                                  |                                  |                            | 25          |
|                                               |                                 |                                  | 11                               | 59                               | 115                              | 60                               | 68                               | 18                               | 28                               |                                  |                                  |                                  |                            | 26          |
|                                               |                                 |                                  | 11                               | 55                               | 119                              | 60                               | 80                               | 21                               | 60                               |                                  |                                  |                                  |                            | 27          |
|                                               |                                 |                                  | 1                                | 22                               | 128                              | 36                               | 176                              | 4                                | 79                               |                                  |                                  |                                  |                            | 28          |
|                                               |                                 |                                  |                                  | 12                               | 94                               | 28                               | 177                              | 8                                | 79                               |                                  |                                  |                                  |                            | 29          |
|                                               |                                 |                                  | 8                                | 8                                | 74                               | 37                               | 125                              | 27                               | 54                               |                                  |                                  |                                  |                            | 30          |
|                                               |                                 | 17                               | 11                               | 25                               | 42                               | 43                               | 94                               | 19                               | 54                               |                                  |                                  |                                  |                            | 31          |
|                                               |                                 | 14                               | 32                               | 10                               | 95                               | 37                               | 73                               | 16                               | 46                               |                                  |                                  |                                  |                            | 32          |
|                                               |                                 |                                  | 25                               | 30                               | 110                              | 6                                | 20                               | 2                                |                                  |                                  |                                  |                                  |                            | 33          |
|                                               |                                 |                                  | 18                               | 13                               | 108                              | 12                               | 6                                |                                  |                                  |                                  |                                  |                                  |                            | 34          |
|                                               |                                 |                                  | 23                               | 11                               | 98                               | 14                               | 6                                |                                  |                                  |                                  |                                  |                                  |                            | 35          |
|                                               |                                 |                                  | 13                               | 27                               | 92                               | 44                               | 6                                |                                  |                                  |                                  |                                  |                                  |                            | 36          |
|                                               |                                 |                                  | 17                               | 44                               | 166                              | 58                               | 6                                |                                  |                                  |                                  |                                  |                                  |                            | 37          |
|                                               |                                 |                                  | 29                               | 34                               | 138                              | 46                               | 12                               |                                  |                                  |                                  |                                  |                                  |                            | 38          |
|                                               |                                 |                                  | 29                               | 34                               | 138                              | 52                               | 14                               |                                  |                                  |                                  |                                  |                                  |                            | 39          |
|                                               |                                 |                                  | 18                               | 23                               | 174                              | 50                               | 10                               |                                  |                                  |                                  |                                  |                                  |                            | 40          |
|                                               |                                 |                                  | 8                                | 10                               | 35                               | 112                              | 125                              |                                  |                                  |                                  |                                  |                                  |                            | 41          |
|                                               |                                 |                                  | 8                                | 10                               | 44                               | 94                               | 147                              |                                  |                                  |                                  |                                  |                                  |                            | 42          |
|                                               |                                 |                                  | 8                                | 6                                | 35                               | 65                               | 122                              |                                  |                                  |                                  |                                  |                                  |                            | 43          |
|                                               |                                 |                                  | 8                                | 6                                | 43                               | 73                               | 129                              |                                  |                                  |                                  |                                  |                                  |                            | 44          |
|                                               |                                 |                                  | 8                                | 10                               | 48                               | 80                               | 99                               |                                  |                                  |                                  |                                  |                                  |                            | 45          |
|                                               |                                 | 2                                | 12                               | 64                               | 118                              | 24                               | 42                               |                                  |                                  |                                  |                                  |                                  |                            | 46          |
| 2                                             | 2                               | 17                               | 34                               | 82                               | 84                               |                                  | 24                               |                                  |                                  |                                  |                                  |                                  |                            | 47          |
| 2                                             |                                 | 24                               | 105                              | 75                               | 153                              |                                  | 21                               |                                  |                                  |                                  |                                  |                                  |                            | 48          |
| 2                                             |                                 | 9                                | 31                               | 41                               | 224                              | 42                               |                                  | 8                                |                                  |                                  |                                  |                                  |                            | 49          |

TABLE A.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER BY YEARS, 1907 TO 1915—

| Line No. | Occupation and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |     |                      |     |                      |       |
|----------|----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-----|----------------------|-----|----------------------|-------|
|          |                                  |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60  | Over 60 and under 72 | 72  | Over 72 and under 84 | 84    |
| 1        | Cinder men—Concl'd.              | 1910  | 482                  | 82.9                              | \$0.163                         | \$13.56                            |                                                |                      |                 | 1   | 34                   |     | 20                   | 427   |
| 2        | 32 plants.....                   | 1911  | 339                  | 81.3                              | .158                            | 12.84                              |                                                |                      |                 |     | 33                   | 35  | 6                    | 265   |
| 3        | 32 plants.....                   | 1911  | 333                  | 81.3                              | .158                            | 12.82                              |                                                |                      |                 |     | 33                   | 35  | 6                    | 259   |
| 4        |                                  | 1912  | 397                  | 75.2                              | .164                            | 12.20                              |                                                |                      | 68              | 24  | 44                   | 36  | 1                    | 224   |
| 5        | 33 plants.....                   | 1912  | 356                  | 77.3                              | .162                            | 12.49                              |                                                |                      | 38              | 14  | 36                   | 42  | 1                    | 225   |
| 6        |                                  | 1913  | 380                  | 79.9                              | .179                            | 14.27                              |                                                |                      |                 | 5   | 47                   | 58  | 26                   | 244   |
| 7        | 31 plants.....                   | 1913  | 357                  | 80.3                              | .183                            | 14.62                              |                                                |                      |                 | 7   | 42                   | 39  | 26                   | 243   |
| 8        |                                  | 1914  | 285                  | 78.2                              | .177                            | 13.82                              |                                                |                      |                 | 10  | 40                   | 72  | 1                    | 162   |
| 9        | 31 plants.....                   | 1914  | 286                  | 78.3                              | .176                            | 13.78                              |                                                |                      |                 | 8   | 36                   | 78  | 1                    | 163   |
| 10       |                                  | 1915  | 254                  | 78.6                              | .174                            | 13.64                              |                                                |                      | 9               | 4   | 24                   | 60  |                      | 157   |
| 11       | Laborers:                        |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |       |
| 12       | 20 plants.....                   | 1907  | 957                  | 75.8                              | .146                            | 11.13                              |                                                |                      |                 | 106 | 350                  | 1   | 52                   | 448   |
| 13       |                                  | 1908  | 718                  | 72.8                              | .140                            | 10.24                              |                                                |                      |                 | 142 | 272                  |     | 109                  | 195   |
| 14       |                                  | 1909  | 757                  | 73.0                              | .138                            | 10.17                              |                                                |                      |                 | 102 | 378                  | 15  | 53                   | 209   |
| 15       |                                  | 1910  | 902                  | 73.6                              | .152                            | 11.18                              |                                                |                      |                 | 159 | 332                  | 23  | 45                   | 343   |
| 16       | 34 plants.....                   | 1910  | 1,423                | 74.7                              | .150                            | 11.23                              |                                                |                      |                 | 269 | 404                  | 26  | 298                  | 426   |
| 17       |                                  | 1911  | 935                  | 73.3                              | .151                            | 11.13                              |                                                |                      |                 | 197 | 288                  | 28  | 134                  | 288   |
| 18       | 35 plants.....                   | 1911  | 937                  | 73.3                              | .151                            | 11.14                              |                                                |                      |                 | 197 | 288                  | 28  | 134                  | 290   |
| 19       |                                  | 1912  | 961                  | 73.1                              | .152                            | 11.15                              |                                                |                      |                 | 192 | 302                  | 81  | 92                   | 294   |
| 20       | 35 plants.....                   | 1912  | 1,049                | 73.1                              | .152                            | 11.15                              |                                                |                      |                 | 207 | 318                  | 109 | 93                   | 322   |
| 21       |                                  | 1913  | 1,273                | 72.5                              | .171                            | 12.43                              |                                                |                      | 2               | 279 | 438                  | 125 | 54                   | 1 375 |
| 22       | 34 plants.....                   | 1913  | 1,193                | 72.5                              | .173                            | 12.65                              |                                                |                      | 2               | 342 | 262                  | 122 | 64                   | 2 401 |
| 23       |                                  | 1914  | 1,010                | 70.8                              | .176                            | 12.47                              |                                                |                      | 5               | 317 | 111                  | 257 | 78                   | 242   |
| 24       | 37 plants.....                   | 1914  | 1,096                | 70.8                              | .177                            | 12.52                              |                                                |                      | 5               | 379 | 133                  | 232 | 78                   | 269   |
| 25       | Unclassified—productive:         | 1915  | 885                  | 71.3                              | .171                            | 12.20                              |                                                | 3                    | 19              | 258 | 144                  | 170 | 64                   | 227   |
| 26       | 37 plants.....                   | 1914  | 1,140                | 76.7                              | .214                            | 16.39                              |                                                | 4                    | 16              | 97  | 112                  | 281 | 79                   | 551   |
| 27       | Unclassified—nonproductive:      | 1915  | 1,152                | 75.5                              | .214                            | 16.07                              |                                                | 6                    | 26              | 138 | 144                  | 251 | 80                   | 3 507 |
| 28       | 38 plants.....                   | 1914  | 2,801                | 70.4                              | .223                            | 15.51                              | 4                                              | 38                   | 355             | 661 | 369                  | 440 | 187                  | 4 747 |
| 29       |                                  | 1915  | 2,497                | 70.9                              | .224                            | 15.69                              | 4                                              | 35                   | 303             | 587 | 307                  | 388 | 149                  | 3 724 |

<sup>1</sup> Including 1 employee whose full-time hours per week were 91.<sup>2</sup> Including 2 employees whose full-time hours per week were 91.<sup>3</sup> Including 3 employees whose full-time hours per week were 91.



HOURLY, AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES,  
*BLAST FURNACES*—Concluded.

| Employees whose rates of wages per hour were— |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |    | Line<br>No. |
|-----------------------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|----|-------------|
| 8<br>and<br>under<br>9<br>cts.                | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |    |             |
| 2                                             |                                 | 11                               | 43                               | 96                               | 280                              | 42                               |                                  | 8                                |                                  |                                  |                                  |                                  |                            | 1  |             |
| 2                                             |                                 | 6                                | 69                               | 72                               | 155                              | 33                               | 1                                | 1                                |                                  |                                  |                                  |                                  |                            | 2  |             |
| 2                                             |                                 | 6                                | 69                               | 74                               | 147                              | 33                               | 1                                | 1                                |                                  |                                  |                                  |                                  |                            | 3  |             |
| 2                                             |                                 | 6                                | 35                               | 113                              | 148                              | 62                               | 31                               |                                  |                                  |                                  |                                  |                                  |                            | 4  |             |
| 2                                             |                                 | 14                               | 28                               | 81                               | 158                              | 66                               | 7                                |                                  |                                  |                                  |                                  |                                  |                            | 5  |             |
|                                               |                                 | 14                               | 21                               | 46                               | 48                               | 135                              | 116                              |                                  |                                  |                                  |                                  |                                  |                            | 6  |             |
|                                               |                                 | 8                                | 14                               | 42                               | 41                               | 135                              | 114                              | 3                                |                                  |                                  |                                  |                                  |                            | 7  |             |
| 2                                             |                                 | 6                                | 25                               | 31                               | 43                               | 100                              | 75                               | 3                                |                                  |                                  |                                  |                                  |                            | 8  |             |
|                                               |                                 | 6                                | 27                               | 38                               | 37                               | 99                               | 79                               |                                  |                                  |                                  |                                  |                                  |                            | 9  |             |
|                                               |                                 | 6                                | 39                               | 28                               | 35                               | 78                               | 68                               |                                  |                                  |                                  |                                  |                                  |                            | 10 |             |
|                                               |                                 | 35                               | 274                              | 381                              | 267                              |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 11 |             |
|                                               | 4                               | 173                              | 74                               | 295                              | 172                              |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 12 |             |
|                                               | 4                               | 175                              | 196                              | 185                              | 197                              |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 13 |             |
|                                               |                                 | 38                               | 197                              | 190                              | 477                              |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 14 |             |
|                                               |                                 | 44                               | 332                              | 466                              | 581                              |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 15 |             |
|                                               |                                 | 38                               | 240                              | 224                              | 433                              |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 16 |             |
|                                               |                                 | 38                               | 240                              | 226                              | 433                              |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 17 |             |
|                                               |                                 | 31                               | 237                              | 227                              | 465                              | 1                                |                                  |                                  |                                  |                                  |                                  |                                  |                            | 18 |             |
|                                               |                                 | 35                               | 241                              | 276                              | 496                              | 1                                |                                  |                                  |                                  |                                  |                                  |                                  |                            | 19 |             |
|                                               |                                 | 10                               | 179                              | 217                              | 250                              | 465                              | 152                              |                                  |                                  |                                  |                                  |                                  |                            | 20 |             |
|                                               |                                 | 10                               | 155                              | 159                              | 212                              | 499                              | 158                              |                                  |                                  |                                  |                                  |                                  |                            | 21 |             |
|                                               |                                 | 5                                | 94                               | 146                              | 191                              | 404                              | 170                              |                                  |                                  |                                  |                                  |                                  |                            | 22 |             |
|                                               |                                 | 26                               | 88                               | 123                              | 193                              | 493                              | 170                              |                                  |                                  |                                  |                                  |                                  |                            | 23 |             |
|                                               |                                 | 41                               | 110                              | 95                               | 206                              | 320                              | 113                              |                                  |                                  |                                  |                                  |                                  |                            | 24 |             |
|                                               |                                 | 18                               | 38                               | 54                               | 141                              | 196                              | 432                              | 153                              | 104                              | 2                                | 2                                |                                  |                            | 25 |             |
|                                               |                                 | 26                               | 40                               | 75                               | 138                              | 173                              | 432                              | 154                              | 111                              | 1                                | 2                                |                                  |                            | 26 |             |
|                                               | 2                               | 47                               | 88                               | 114                              | 262                              | 454                              | 1,047                            | 420                              | 334                              | 31                               | 1                                |                                  | 1                          | 27 |             |
| 2                                             |                                 | 54                               | 90                               | 110                              | 195                              | 367                              | 920                              | 420                              | 310                              | 26                               | 2                                |                                  | 1                          | 28 |             |

<sup>4</sup> Including 11 employees whose full-time hours per week were 91, and 1 employee whose full-time hours per week were 98.

TABLE B.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER YEARS, 1913 TO 1915—

[The abbreviation "G. L. and M. W." in this table stands for "Great Lakes and

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |     |                      |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|-----|----------------------|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72  | Over 72 and under 84 |
|          | Stockers:                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 1        | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 2        | 5 plants.....                               | 1913  | 119                  | 69.4                              | \$0.183                         | \$12.68                            |                                                |                      | 14              | 26 | 33                   | 21  | 25                   |
|          |                                             | 1914  | 69                   | 69.7                              | .181                            | 12.62                              |                                                |                      | 7               | 11 | 25                   | 14  | 12                   |
| 3        | 5 plants.....                               | 1914  | 79                   | 69.8                              | .173                            | 12.06                              |                                                |                      | 7               | 19 | 21                   | 14  | 18                   |
| 4        |                                             | 1915  | 75                   | 71.1                              | .156                            | 11.16                              |                                                |                      |                 | 18 | 28                   | 10  | 18                   |
| 5        | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 6        | 9 plants.....                               | 1913  | 789                  | 80.1                              | .200                            | 16.07                              |                                                |                      |                 | 2  | 110                  | 3   | 277                  |
| 7        |                                             | 1914  | 636                  | 74.9                              | .197                            | 14.73                              |                                                |                      | 24              |    | 199                  | 122 | 153                  |
| 8        |                                             | 1915  | 533                  | 74.8                              | .201                            | 14.98                              |                                                |                      | 13              | 4  | 158                  | 106 | 136                  |
| 9        | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 10       | 10 plants.....                              | 1913  | 234                  | 77.5                              | .193                            | 14.91                              |                                                |                      |                 | 4  | 26                   | 88  | 116                  |
| 11       |                                             | 1914  | 178                  | 77.3                              | .194                            | 14.93                              |                                                |                      |                 | 4  | 20                   | 79  | 85                   |
| 12       | 11 plants.....                              | 1914  | 193                  | 76.1                              | .193                            | 14.68                              |                                                |                      |                 | 12 | 10                   | 81  | 85                   |
| 13       | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 14       | 9 plants.....                               | 1913  | 127                  | 74.5                              | .145                            | 10.66                              |                                                |                      |                 |    | 55                   | 36  | 36                   |
| 15       |                                             | 1914  | 118                  | 74.6                              | .149                            | 11.04                              |                                                |                      |                 |    | 67                   | 8   | 32                   |
| 16       | 10 plants.....                              | 1914  | 123                  | 76.2                              | .140                            | 10.65                              |                                                |                      |                 | 6  | 53                   |     | 53                   |
| 17       |                                             | 1915  | 117                  | 76.8                              | .143                            | 11.03                              |                                                |                      |                 | 6  | 44                   | 11  | 55                   |
| 18       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 19       | 33 plants.....                              | 1913  | 1,269                | 78.0                              | .192                            | 15.00                              |                                                |                      | 14              | 32 | 224                  | 148 | 277                  |
|          |                                             | 1914  | 1,001                | 75.0                              | .190                            | 14.19                              |                                                |                      | 31              | 15 | 301                  | 223 | 164                  |
| 20       | 35 plants.....                              | 1914  | 1,031                | 74.9                              | .188                            | 14.03                              |                                                |                      | 31              | 42 | 283                  | 217 | 164                  |
| 21       |                                             | 1915  | 878                  | 74.6                              | .188                            | 13.99                              |                                                |                      | 19              | 40 | 240                  | 192 | 149                  |
| 22       | Bottom fillers:                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 23       | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 24       | 3 plants.....                               | 1913  | 174                  | 84.0                              | .164                            | 13.79                              |                                                |                      |                 |    |                      |     | 174                  |
| 25       |                                             | 1914  | 142                  | 84.0                              | .165                            | 13.84                              |                                                |                      |                 |    |                      |     | 142                  |
| 26       | 1 plant.....                                | 1914  | 102                  | 84.0                              | .171                            | 14.32                              |                                                |                      |                 |    |                      |     | 102                  |
| 27       |                                             | 1915  | 36                   | 84.0                              | .172                            | 14.41                              |                                                |                      |                 |    |                      |     | 36                   |
| 28       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 29       | 2 plants.....                               | 1913  | 48                   | 84.0                              | .208                            | 17.50                              |                                                |                      |                 |    |                      |     | 48                   |
| 30       |                                             | 1914  | 46                   | 84.0                              | .209                            | 17.55                              |                                                |                      |                 |    |                      |     | 46                   |
| 31       | 1 plant.....                                | 1914  | 24                   | 84.0                              | .210                            | 17.61                              |                                                |                      |                 |    |                      |     | 24                   |
| 32       |                                             | 1915  | 24                   | 84.0                              | .210                            | 17.61                              |                                                |                      |                 |    |                      |     | 24                   |
| 33       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 34       | 3 plants.....                               | 1913  | 92                   | 84.0                              | .196                            | 16.47                              |                                                |                      |                 |    |                      |     | 92                   |
| 35       |                                             | 1914  | 46                   | 80.9                              | .192                            | 15.53                              |                                                |                      |                 |    |                      | 12  | 34                   |
| 36       |                                             | 1915  | 52                   | 79.4                              | .190                            | 15.14                              |                                                |                      |                 |    |                      | 20  | 32                   |
| 37       | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 38       | 5 plants.....                               | 1913  | 155                  | 78.2                              | .144                            | 11.32                              |                                                |                      |                 |    |                      | 75  | 80                   |
| 39       |                                             | 1914  | 126                  | 79.4                              | .146                            | 11.65                              |                                                |                      |                 |    |                      | 48  | 78                   |
| 40       | 4 plants.....                               | 1914  | 36                   | 84.0                              | .139                            | 11.70                              |                                                |                      |                 |    |                      |     | 36                   |
| 41       |                                             | 1915  | 36                   | 84.0                              | .137                            | 11.52                              |                                                |                      |                 |    |                      |     | 36                   |
| 42       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 43       | 13 plants.....                              | 1913  | 469                  | 82.1                              | .168                            | 13.88                              |                                                |                      |                 |    |                      | 75  | 304                  |
| 44       |                                             | 1914  | 360                  | 82.0                              | .167                            | 13.76                              |                                                |                      |                 |    |                      | 60  | 300                  |
| 45       | 9 plants.....                               | 1914  | 208                  | 83.3                              | .174                            | 14.52                              |                                                |                      |                 |    |                      | 12  | 196                  |
| 46       |                                             | 1915  | 148                  | 82.4                              | .176                            | 14.48                              |                                                |                      |                 |    |                      | 20  | 128                  |
| 47       | Top fillers:                                |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 48       | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 49       | 3 plants.....                               | 1913  | 24                   | 84.0                              | .189                            | 15.88                              |                                                |                      |                 |    |                      |     | 24                   |
| 50       |                                             | 1914  | 26                   | 84.0                              | .194                            | 16.26                              |                                                |                      |                 |    |                      |     | 26                   |
| 51       | 1 plant.....                                | 1914  | 22                   | 84.0                              | .200                            | 16.80                              |                                                |                      |                 |    |                      |     | 22                   |
| 52       |                                             | 1915  | 10                   | 84.0                              | .200                            | 16.80                              |                                                |                      |                 |    |                      |     | 10                   |

HOURLY AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY  
BLAST FURNACES.

Middle West." The figures for each group of years are for identical plants."]

| Employees whose rates of wages per hour were— |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |    | Line<br>No. |
|-----------------------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|----|-------------|
| 8<br>and<br>under<br>9<br>cts.                | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |    |             |
|                                               |                                 |                                  | 10                               | 59                               | 14                               | 4                                | 10                               | 14                               | 8                                |                                  |                                  |                                  |                            | 1  |             |
|                                               |                                 |                                  | 9                                | 31                               | 10                               | 1                                |                                  | 18                               |                                  |                                  |                                  |                                  |                            | 2  |             |
|                                               |                                 |                                  | 11                               | 35                               | 18                               | 1                                |                                  | 14                               |                                  |                                  |                                  |                                  |                            | 3  |             |
|                                               |                                 |                                  | 10                               | 45                               | 16                               | 1                                |                                  | 3                                |                                  |                                  |                                  |                                  |                            | 4  |             |
|                                               |                                 |                                  |                                  |                                  | 84                               | 298                              | 363                              | 44                               |                                  |                                  |                                  |                                  |                            | 5  |             |
|                                               |                                 |                                  |                                  |                                  | 72                               | 283                              | 281                              |                                  |                                  |                                  |                                  |                                  |                            | 6  |             |
|                                               |                                 |                                  |                                  |                                  | 51                               | 207                              | 245                              | 30                               |                                  |                                  |                                  |                                  |                            | 7  |             |
|                                               |                                 |                                  |                                  |                                  | 16                               | 137                              | 77                               | 4                                |                                  |                                  |                                  |                                  |                            | 8  |             |
|                                               |                                 |                                  |                                  |                                  | 22                               | 91                               | 61                               | 4                                |                                  |                                  |                                  |                                  |                            | 9  |             |
|                                               |                                 |                                  |                                  |                                  | 22                               | 106                              | 61                               | 4                                |                                  |                                  |                                  |                                  |                            | 10 |             |
|                                               |                                 |                                  |                                  |                                  | 26                               | 67                               | 58                               | 2                                |                                  |                                  |                                  |                                  |                            | 11 |             |
|                                               |                                 | 31                               | 26                               | 31                               | 23                               | 10                               | 6                                |                                  |                                  |                                  |                                  |                                  |                            | 12 |             |
|                                               |                                 | 12                               | 12                               | 51                               | 37                               |                                  | 6                                |                                  |                                  |                                  |                                  |                                  |                            | 13 |             |
|                                               |                                 | 31                               | 17                               | 51                               | 18                               |                                  | 6                                |                                  |                                  |                                  |                                  |                                  |                            | 14 |             |
|                                               |                                 | 40                               | 18                               | 35                               | 6                                |                                  | 18                               |                                  |                                  |                                  |                                  |                                  |                            | 15 |             |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |    |             |
|                                               |                                 | 31                               | 36                               | 90                               | 137                              | 449                              | 458                              | 62                               | 8                                |                                  |                                  |                                  |                            | 16 |             |
|                                               |                                 | 12                               | 21                               | 82                               | 141                              | 375                              | 348                              | 22                               |                                  |                                  |                                  |                                  |                            | 17 |             |
|                                               |                                 | 31                               | 28                               | 86                               | 130                              | 390                              | 348                              | 18                               |                                  |                                  |                                  |                                  |                            | 18 |             |
|                                               |                                 | 40                               | 28                               | 80                               | 99                               | 275                              | 321                              | 35                               |                                  |                                  |                                  |                                  |                            | 19 |             |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |    |             |
|                                               |                                 |                                  |                                  | 88                               | 86                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 20 |             |
|                                               |                                 |                                  |                                  | 40                               | 102                              |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 21 |             |
|                                               |                                 |                                  |                                  |                                  | 102                              |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 22 |             |
|                                               |                                 |                                  |                                  |                                  | 36                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 23 |             |
|                                               |                                 |                                  |                                  |                                  |                                  | 12                               | 36                               |                                  |                                  |                                  |                                  |                                  |                            | 24 |             |
|                                               |                                 |                                  |                                  |                                  |                                  | 10                               | 36                               |                                  |                                  |                                  |                                  |                                  |                            | 25 |             |
|                                               |                                 |                                  |                                  |                                  |                                  | 8                                | 16                               |                                  |                                  |                                  |                                  |                                  |                            | 26 |             |
|                                               |                                 |                                  |                                  |                                  |                                  | 8                                | 16                               |                                  |                                  |                                  |                                  |                                  |                            | 27 |             |
|                                               |                                 |                                  |                                  |                                  |                                  | 46                               | 46                               |                                  |                                  |                                  |                                  |                                  |                            | 28 |             |
|                                               |                                 |                                  |                                  |                                  |                                  | 34                               | 12                               |                                  |                                  |                                  |                                  |                                  |                            | 29 |             |
|                                               |                                 |                                  |                                  |                                  |                                  | 40                               | 12                               |                                  |                                  |                                  |                                  |                                  |                            | 30 |             |
|                                               |                                 |                                  | 83                               | 72                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 31 |             |
|                                               |                                 |                                  | 58                               | 68                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 32 |             |
|                                               |                                 | 2                                | 12                               | 22                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 33 |             |
|                                               | 2                               | 10                               | 2                                | 22                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 34 |             |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |    |             |
|                                               |                                 |                                  | 83                               | 160                              | 86                               | 58                               | 82                               |                                  |                                  |                                  |                                  |                                  |                            | 35 |             |
|                                               |                                 |                                  | 58                               | 108                              | 102                              | 44                               | 48                               |                                  |                                  |                                  |                                  |                                  |                            | 36 |             |
|                                               |                                 | 2                                | 12                               | 22                               | 102                              | 42                               | 28                               |                                  |                                  |                                  |                                  |                                  |                            | 37 |             |
|                                               | 2                               | 10                               | 2                                | 22                               | 36                               | 48                               | 28                               |                                  |                                  |                                  |                                  |                                  |                            | 38 |             |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |    |             |
|                                               |                                 |                                  |                                  |                                  | 8                                |                                  | 16                               |                                  |                                  |                                  |                                  |                                  |                            | 39 |             |
|                                               |                                 |                                  |                                  | 4                                |                                  |                                  | 22                               |                                  |                                  |                                  |                                  |                                  |                            | 40 |             |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  | 22                               |                                  |                                  |                                  |                                  |                                  |                            | 41 |             |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  | 10                               |                                  |                                  |                                  |                                  |                                  |                            | 42 |             |

TABLE B.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER YEARS, 1913 TO 1915—

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |                      |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----------------------|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | Over 72 and under 84 |
| 1        | Top fillers—Concld. Pittsburgh—             | 1913  | 11                   | 84.0                              | \$0.227                         | \$19.04                            |                                                |                      |                 |    |                      | 11                   |
| 2        | 2 plants.....                               | 1914  | 10                   | 84.0                              | .228                            | 19.15                              |                                                |                      |                 |    |                      | 10                   |
| 3        | 1 plant.....                                | 1914  | 6                    | 84.0                              | .238                            | 19.99                              |                                                |                      |                 |    |                      | 6                    |
| 4        | G. L. and M. W.—                            | 1915  | 6                    | 84.0                              | .238                            | 19.99                              |                                                |                      |                 |    |                      | 6                    |
| 5        | 3 plants.....                               | 1913  | 30                   | 78.4                              | .238                            | 18.21                              |                                                |                      | 6               |    |                      | 24                   |
| 6        |                                             | 1914  | 16                   | 70.5                              | .251                            | 17.07                              |                                                |                      | 6               |    | 4                    | 6                    |
| 7        |                                             | 1915  | 16                   | 70.5                              | .251                            | 17.07                              |                                                |                      | 6               |    | 4                    | 6                    |
| 8        | Southern—                                   | 1913  | 30                   | 80.8                              | .164                            | 13.25                              |                                                |                      |                 |    | 8                    | 22                   |
| 9        | 5 plants.....                               | 1914  | 28                   | 80.6                              | .164                            | 13.20                              |                                                |                      |                 |    | 8                    | 20                   |
| 10       | 3 plants.....                               | 1914  | 12                   | 84.0                              | .162                            | 13.64                              |                                                |                      |                 |    |                      | 12                   |
| 11       |                                             | 1915  | 12                   | 84.0                              | .161                            | 13.32                              |                                                |                      |                 |    |                      | 12                   |
| 12       | Total—                                      | 1913  | 95                   | 81.2                              | .201                            | 16.15                              |                                                |                      | 6               |    | 8                    | 81                   |
| 13       | 13 plants.....                              | 1914  | 80                   | 80.1                              | .199                            | 15.71                              |                                                |                      | 6               |    | 12                   | 62                   |
| 14       | 8 plants.....                               | 1914  | 56                   | 80.1                              | .210                            | 16.54                              |                                                |                      | 6               |    | 4                    | 46                   |
| 15       |                                             | 1915  | 44                   | 79.0                              | .213                            | 16.44                              |                                                |                      | 6               |    | 4                    | 34                   |
| 16       | Larry men:                                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |                      |
| 17       | Eastern—                                    | 1913  | 10                   | 79.2                              | .201                            | 16.01                              |                                                |                      |                 |    | 4                    | 6                    |
| 18       | 3 plants.....                               | 1914  | 10                   | 79.2                              | .201                            | 16.01                              |                                                |                      |                 |    | 4                    | 6                    |
| 19       | 4 plants.....                               | 1914  | 12                   | 80.0                              | .198                            | 15.90                              |                                                |                      |                 |    | 4                    | 8                    |
| 20       | Pittsburgh—                                 | 1915  | 10                   | 81.6                              | .198                            | 16.16                              |                                                |                      |                 |    | 2                    | 8                    |
| 21       | 9 plants.....                               | 1913  | 134                  | 84.0                              | .214                            | 17.98                              |                                                |                      |                 |    |                      | 134                  |
| 22       |                                             | 1914  | 98                   | 78.7                              | .217                            | 17.13                              |                                                |                      |                 |    | 40                   | 50                   |
| 23       |                                             | 1915  | 106                  | 78.6                              | .217                            | 17.07                              |                                                |                      |                 |    | 44                   | 54                   |
| 24       | G. L. and M. W.—                            | 1913  | 70                   | 78.9                              | .239                            | 18.68                              |                                                |                      |                 |    | 30                   | 40                   |
| 25       | 7 plants.....                               | 1914  | 46                   | 76.2                              | .239                            | 18.18                              |                                                |                      |                 |    | 30                   | 16                   |
| 26       | 9 plants.....                               | 1914  | 56                   | 75.9                              | .237                            | 17.91                              |                                                |                      |                 |    | 38                   | 18                   |
| 27       | Southern—                                   | 1915  | 62                   | 75.1                              | .233                            | 17.50                              |                                                |                      |                 |    | 46                   | 16                   |
| 28       | 4 plants.....                               | 1913  | 24                   | 84.0                              | .175                            | 14.68                              |                                                |                      |                 |    |                      | 24                   |
| 29       |                                             | 1914  | 20                   | 84.0                              | .178                            | 14.95                              |                                                |                      |                 |    |                      | 20                   |
| 30       | 5 plants.....                               | 1914  | 26                   | 84.0                              | .168                            | 14.13                              |                                                |                      |                 |    |                      | 26                   |
| 31       |                                             | 1915  | 34                   | 84.0                              | .155                            | 13.05                              |                                                |                      |                 |    |                      | 34                   |
| 32       | Total—                                      | 1913  | 238                  | 82.3                              | .217                            | 17.77                              |                                                |                      |                 |    | 34                   | 204                  |
| 33       | 23 plants.....                              | 1914  | 174                  | 78.6                              | .218                            | 17.10                              |                                                |                      |                 |    | 74                   | 92                   |
| 34       | 27 plants.....                              | 1914  | 192                  | 78.6                              | .215                            | 16.88                              |                                                |                      |                 |    | 82                   | 102                  |
| 35       |                                             | 1915  | 212                  | 78.6                              | .211                            | 16.51                              |                                                |                      |                 |    | 92                   | 112                  |
| 36       | Larry men's helpers:                        |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |                      |
| 37       | Eastern—                                    | 1913  | 10                   | 79.2                              | .168                            | 13.34                              |                                                |                      |                 |    | 4                    | 6                    |
| 38       | 3 plants.....                               | 1914  | 10                   | 79.2                              | .168                            | 13.34                              |                                                |                      |                 |    | 4                    | 6                    |
| 39       | 4 plants.....                               | 1914  | 12                   | 80.0                              | .166                            | 13.33                              |                                                |                      |                 |    | 4                    | 8                    |
| 40       | Pittsburgh—                                 | 1915  | 10                   | 81.6                              | .164                            | 13.43                              |                                                |                      |                 |    | 2                    | 8                    |
| 41       | 9 plants.....                               | 1913  | 236                  | 84.0                              | .197                            | 16.55                              |                                                |                      |                 |    |                      | 236                  |
| 42       |                                             | 1914  | 160                  | 77.6                              | .196                            | 15.20                              |                                                |                      |                 |    | 80                   | 72                   |
| 43       |                                             | 1915  | 178                  | 77.3                              | .196                            | 15.15                              |                                                |                      |                 |    | 96                   | 74                   |
| 44       | G. L. and M. W.—                            | 1913  | 82                   | 78.7                              | .190                            | 14.93                              |                                                |                      |                 |    | 36                   | 46                   |
| 45       | 7 plants.....                               | 1914  | 46                   | 78.8                              | .189                            | 14.91                              |                                                |                      |                 |    | 20                   | 26                   |
| 46       | 9 plants.....                               | 1914  | 52                   | 78.5                              | .189                            | 14.80                              |                                                |                      |                 |    | 24                   | 28                   |
| 47       |                                             | 1915  | 53                   | 77.2                              | .187                            | 14.46                              |                                                |                      | 1               |    | 28                   | 24                   |

HOURLY AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY  
BLAST FURNACES—Continued.

| Employees whose rates of wages per hour were— |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | Line No. |
|-----------------------------------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-------------------|----------|
| 8 and under 9 cts.                            | 9 and under 10 cts. | 10 and under 12 cts. | 12 and under 14 cts. | 14 and under 16 cts. | 16 and under 18 cts. | 18 and under 20 cts. | 20 and under 25 cts. | 25 and under 30 cts. | 30 and under 40 cts. | 40 and under 50 cts. | 50 and under 60 cts. | 60 and under 70 cts. | 70 cts. and over. |          |
|                                               |                     |                      |                      |                      |                      |                      | 11                   |                      |                      |                      |                      |                      |                   | 1        |
|                                               |                     |                      |                      |                      |                      |                      | 10                   |                      |                      |                      |                      |                      |                   | 2        |
|                                               |                     |                      |                      |                      |                      |                      | 6                    |                      |                      |                      |                      |                      |                   | 3        |
|                                               |                     |                      |                      |                      |                      |                      | 6                    |                      |                      |                      |                      |                      |                   | 4        |
|                                               |                     |                      |                      |                      |                      |                      | 24                   |                      | 6                    |                      |                      |                      |                   | 5        |
|                                               |                     |                      |                      |                      |                      |                      | 10                   |                      | 6                    |                      |                      |                      |                   | 6        |
|                                               |                     |                      |                      |                      |                      |                      | 10                   |                      | 6                    |                      |                      |                      |                   | 7        |
|                                               |                     | 2                    | 2                    | 8                    | 4                    | 14                   |                      |                      |                      |                      |                      |                      |                   | 8        |
|                                               |                     | 2                    | 2                    | 8                    | 4                    | 12                   |                      |                      |                      |                      |                      |                      |                   | 9        |
|                                               |                     | 2                    | 2                    |                      | 2                    | 8                    |                      |                      |                      |                      |                      |                      |                   | 10       |
|                                               |                     | 2                    | 2                    |                      |                      | 6                    |                      |                      |                      |                      |                      |                      |                   | 11       |
|                                               |                     | 2                    | 2                    | 8                    | 12                   | 14                   | 51                   |                      | 6                    |                      |                      |                      |                   | 12       |
|                                               |                     | 2                    | 2                    | 12                   | 4                    | 12                   | 42                   |                      | 6                    |                      |                      |                      |                   | 13       |
|                                               |                     | 2                    | 2                    |                      |                      | 8                    | 38                   |                      | 6                    |                      |                      |                      |                   | 14       |
|                                               |                     | 2                    | 2                    |                      | 2                    | 6                    | 26                   |                      | 6                    |                      |                      |                      |                   | 15       |
|                                               |                     |                      |                      |                      |                      | 6                    | 4                    |                      |                      |                      |                      |                      |                   | 16       |
|                                               |                     |                      |                      |                      |                      | 6                    | 4                    |                      |                      |                      |                      |                      |                   | 17       |
|                                               |                     |                      |                      |                      | 4                    | 8                    | 4                    |                      |                      |                      |                      |                      |                   | 18       |
|                                               |                     |                      |                      |                      |                      | 2                    | 4                    |                      |                      |                      |                      |                      |                   | 19       |
|                                               |                     |                      |                      |                      |                      |                      | 128                  | 6                    |                      |                      |                      |                      |                   | 20       |
|                                               |                     |                      |                      |                      |                      |                      | 90                   | 8                    |                      |                      |                      |                      |                   | 21       |
|                                               |                     |                      |                      |                      |                      |                      | 98                   | 8                    |                      |                      |                      |                      |                   | 22       |
|                                               |                     |                      |                      |                      |                      |                      | 40                   | 30                   |                      |                      |                      |                      |                   | 23       |
|                                               |                     |                      |                      |                      |                      |                      | 28                   | 18                   |                      |                      |                      |                      |                   | 24       |
|                                               |                     |                      |                      |                      |                      | 2                    | 36                   | 18                   |                      |                      |                      |                      |                   | 25       |
|                                               |                     |                      |                      |                      |                      | 4                    | 36                   | 22                   |                      |                      |                      |                      |                   | 26       |
|                                               |                     | 2                    | 6                    | 4                    | 4                    | 12                   |                      |                      |                      |                      |                      |                      |                   | 27       |
|                                               |                     | 2                    | 4                    | 2                    | 2                    | 12                   |                      |                      |                      |                      |                      |                      |                   | 28       |
|                                               |                     | 8                    | 4                    | 2                    | 2                    | 12                   |                      |                      |                      |                      |                      |                      |                   | 29       |
|                                               |                     | 16                   | 4                    | 2                    | 2                    | 12                   |                      |                      |                      |                      |                      |                      |                   | 30       |
|                                               |                     | 2                    | 6                    | 4                    | 4                    | 18                   | 172                  | 36                   |                      |                      |                      |                      |                   | 31       |
|                                               |                     | 2                    | 4                    | 2                    | 2                    | 18                   | 122                  | 26                   |                      |                      |                      |                      |                   | 32       |
|                                               |                     | 8                    | 4                    | 2                    | 2                    | 22                   | 130                  | 26                   |                      |                      |                      |                      |                   | 33       |
|                                               |                     | 16                   | 4                    | 6                    | 6                    | 18                   | 138                  | 30                   |                      |                      |                      |                      |                   | 34       |
|                                               |                     |                      |                      | 4                    | 2                    | 4                    |                      |                      |                      |                      |                      |                      |                   | 35       |
|                                               |                     |                      |                      | 4                    | 2                    | 4                    |                      |                      |                      |                      |                      |                      |                   | 36       |
|                                               |                     |                      |                      | 6                    | 2                    | 4                    |                      |                      |                      |                      |                      |                      |                   | 37       |
|                                               |                     |                      |                      | 6                    |                      | 4                    |                      |                      |                      |                      |                      |                      |                   | 38       |
|                                               |                     |                      |                      |                      |                      | 94                   | 142                  |                      |                      |                      |                      |                      |                   | 39       |
|                                               |                     |                      |                      |                      |                      | 88                   | 72                   |                      |                      |                      |                      |                      |                   | 40       |
|                                               |                     |                      |                      |                      |                      | 90                   | 88                   |                      |                      |                      |                      |                      |                   | 41       |
|                                               |                     |                      |                      |                      | 12                   | 64                   | 6                    |                      |                      |                      |                      |                      |                   | 42       |
|                                               |                     |                      |                      |                      | 6                    | 38                   | 2                    |                      |                      |                      |                      |                      |                   | 43       |
|                                               |                     |                      |                      |                      | 8                    | 42                   | 2                    |                      |                      |                      |                      |                      |                   | 44       |
|                                               |                     |                      |                      |                      | 18                   | 25                   | 10                   |                      |                      |                      |                      |                      |                   | 45       |

TABLE B.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER YEARS, 1913 TO 1915—

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 |
| 1        | Larry men's helpers—                        |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 2        | Concluded.                                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 3        | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 4        | 4 plants.....                               | 1913  | 24                   | 84.0                              | \$0.144                         | \$12.12                            |                                                |                      |                 |    |                      |    | 24                   |
|          |                                             | 1914  | 22                   | 84.0                              | .146                            | 12.27                              |                                                |                      |                 |    |                      |    | 22                   |
| 5        | 5 plants.....                               | 1914  | 26                   | 84.0                              | .140                            | 11.79                              |                                                |                      |                 |    |                      |    | 26                   |
| 6        |                                             | 1915  | 34                   | 84.0                              | .130                            | 10.90                              |                                                |                      |                 |    |                      |    | 34                   |
| 7        | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 8        | 23 plants.....                              | 1913  | 352                  | 82.6                              | .191                            | 15.78                              |                                                |                      |                 |    |                      |    | 312                  |
|          |                                             | 1914  | 238                  | 78.5                              | .189                            | 14.79                              |                                                |                      |                 |    | 40                   |    | 126                  |
| 9        | 27 plants.....                              | 1914  | 250                  | 78.6                              | .187                            | 14.67                              |                                                |                      |                 |    | 108                  | 8  | 134                  |
| 10       |                                             | 1915  | 275                  | 78.3                              | .185                            | 14.43                              |                                                |                      |                 | 1  | 126                  | 8  | 149                  |
| 11       | Skip operators:                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 12       | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 13       | 3 plants.....                               | 1913  | 10                   | 79.2                              | .196                            | 15.70                              |                                                |                      |                 |    | 4                    |    | 6                    |
| 14       |                                             | 1914  | 10                   | 79.2                              | .196                            | 15.70                              |                                                |                      |                 |    | 4                    |    | 6                    |
| 15       | 4 plants.....                               | 1914  | 12                   | 80.0                              | .194                            | 15.64                              |                                                |                      |                 |    | 4                    |    | 8                    |
| 16       |                                             | 1915  | 10                   | 81.6                              | .196                            | 16.08                              |                                                |                      |                 |    | 2                    |    | 8                    |
| 17       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 18       | 9 plants.....                               | 1913  | 84                   | 84.0                              | .227                            | 19.08                              |                                                |                      |                 |    |                      |    | 84                   |
| 19       |                                             | 1914  | 64                   | 78.4                              | .230                            | 18.06                              |                                                |                      |                 |    | 26                   | 8  | 20                   |
| 20       |                                             | 1915  | 72                   | 73.7                              | .231                            | 18.23                              |                                                |                      |                 |    | 28                   | 8  | 36                   |
| 21       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 22       | 6 plants.....                               | 1913  | 42                   | 81.1                              | .225                            | 18.24                              |                                                |                      |                 |    | 10                   |    | 32                   |
| 23       |                                             | 1914  | 29                   | 79.0                              | .228                            | 18.02                              |                                                |                      |                 |    | 12                   |    | 17                   |
| 24       | 8 plants.....                               | 1914  | 37                   | 78.2                              | .224                            | 17.53                              |                                                |                      |                 |    | 18                   |    | 19                   |
| 25       |                                             | 1915  | 40                   | 76.8                              | .224                            | 17.22                              |                                                |                      |                 |    | 24                   |    | 16                   |
| 26       | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 27       | 4 plants.....                               | 1913  | 22                   | 84.0                              | .170                            | 14.26                              |                                                |                      |                 |    |                      |    | 22                   |
|          |                                             | 1914  | 20                   | 84.0                              | .171                            | 14.39                              |                                                |                      |                 |    |                      |    | 20                   |
| 28       | 7 plants.....                               | 1914  | 26                   | 84.0                              | .169                            | 14.16                              |                                                |                      |                 |    |                      |    | 26                   |
| 29       |                                             | 1915  | 30                   | 84.0                              | .169                            | 14.22                              |                                                |                      |                 |    |                      |    | 30                   |
| 30       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 31       | 22 plants.....                              | 1913  | 158                  | 82.9                              | .217                            | 17.97                              |                                                |                      |                 |    | 14                   |    | 144                  |
| 32       |                                             | 1914  | 123                  | 79.5                              | .217                            | 17.26                              |                                                |                      |                 |    | 42                   | 8  | 73                   |
| 33       | 28 plants.....                              | 1914  | 139                  | 79.5                              | .214                            | 16.98                              |                                                |                      |                 |    | 48                   | 8  | 87                   |
| 34       |                                             | 1915  | 152                  | 79.4                              | .215                            | 17.03                              |                                                |                      |                 |    | 54                   | 8  | 90                   |
| 35       | Blowers:                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 36       | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 37       | 5 plants.....                               | 1913  | 14                   | 81.4                              | .260                            | 20.94                              |                                                |                      |                 |    | 3                    |    | 11                   |
| 38       |                                             | 1914  | 10                   | 81.1                              | .277                            | 22.09                              |                                                |                      |                 |    | 3                    | 1  | 16                   |
| 39       | 6 plants.....                               | 1914  | 15                   | 82.1                              | .285                            | 23.19                              |                                                |                      |                 |    | 3                    | 1  | 11                   |
| 40       |                                             | 1915  | 14                   | 82.8                              | .282                            | 23.11                              |                                                |                      |                 |    | 2                    | 1  | 11                   |
| 41       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 42       | 10 plants.....                              | 1913  | 56                   | 84.0                              | .343                            | 28.82                              |                                                |                      |                 |    |                      |    | 56                   |
| 43       |                                             | 1914  | 57                   | 80.4                              | .333                            | 26.77                              |                                                |                      |                 | 1  | 13                   | 6  | 37                   |
| 44       |                                             | 1915  | 62                   | 80.5                              | .347                            | 27.77                              |                                                |                      |                 | 1  | 14                   | 6  | 41                   |
| 45       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 46       | 10 plants.....                              | 1913  | 54                   | 80.4                              | .364                            | 29.08                              |                                                |                      |                 |    | 16                   |    | 38                   |
| 47       |                                             | 1914  | 38                   | 79.6                              | .367                            | 29.09                              |                                                |                      |                 |    | 14                   |    | 24                   |
| 48       | 11 plants.....                              | 1914  | 44                   | 78.5                              | .375                            | 29.32                              |                                                |                      |                 |    | 20                   |    | 24                   |
| 49       |                                             | 1915  | 41                   | 77.6                              | .381                            | 29.50                              |                                                |                      |                 |    | 22                   |    | 19                   |
| 50       | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 51       | 9 plants.....                               | 1913  | 30                   | 82.4                              | .288                            | 23.74                              |                                                |                      |                 |    | 4                    |    | 26                   |
| 52       |                                             | 1914  | 25                   | 82.1                              | .284                            | 23.29                              |                                                |                      |                 |    | 4                    |    | 21                   |
| 53       | 11 plants.....                              | 1914  | 27                   | 84.0                              | .291                            | 24.43                              |                                                |                      |                 |    |                      |    | 27                   |
| 54       |                                             | 1915  | 32                   | 84.0                              | .282                            | 23.69                              |                                                |                      |                 |    |                      |    | 32                   |

<sup>1</sup> Including 2 employees whose full-time hours per week were 91.

HOUR, AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY  
 BLAST FURNACES—Continued.

| Employees whose rates of wages per hour were— |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |  | Line<br>No. |
|-----------------------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|--|-------------|
| 8<br>and<br>under<br>9<br>cts.                | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |  |             |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |  | 1           |
|                                               |                                 |                                  | 12<br>10                         |                                  | 12<br>12                         |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |  | 2           |
|                                               |                                 | 6<br>14                          | 8<br>8                           |                                  | 12<br>12                         |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |  | 3           |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |  | 4           |
|                                               |                                 |                                  | 12<br>10                         | 4<br>4                           | 26<br>20                         | 162<br>130                       | 148<br>74                        |                                  |                                  |                                  |                                  |                                  |                            |  | 5           |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |  | 6           |
|                                               |                                 | 6<br>14                          | 8<br>8                           | 6<br>6                           | 22<br>30                         | 134<br>119                       | 74<br>98                         |                                  |                                  |                                  |                                  |                                  |                            |  | 7           |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |  | 8           |
|                                               |                                 |                                  |                                  |                                  | 4<br>4                           | 2<br>2                           | 4<br>4                           |                                  |                                  |                                  |                                  |                                  |                            |  | 9           |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |  | 10          |
|                                               |                                 |                                  |                                  |                                  | 4<br>6                           | 4<br>4                           | 4<br>4                           |                                  |                                  |                                  |                                  |                                  |                            |  | 11          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |  | 12          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  | 76<br>56<br>64                   | 8<br>8<br>8                      |                                  |                                  |                                  |                                  |                            |  | 13          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |  | 14          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  | 38<br>24                         | 4<br>5                           |                                  |                                  |                                  |                                  |                            |  | 15          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |  | 16          |
|                                               |                                 |                                  |                                  |                                  |                                  | 2<br>4                           | 30<br>32                         | 5<br>4                           |                                  |                                  |                                  |                                  |                            |  | 17          |
|                                               |                                 |                                  |                                  | 8<br>6                           | 2<br>2                           | 12<br>12                         |                                  |                                  |                                  |                                  |                                  |                                  |                            |  | 18          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |  | 19          |
|                                               |                                 |                                  | 4<br>4                           | 6<br>6                           | 2<br>2                           | 12<br>18                         | 2                                |                                  |                                  |                                  |                                  |                                  |                            |  | 20          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |  | 21          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |  | 22          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |  | 23          |
|                                               |                                 |                                  |                                  | 8<br>6                           | 6<br>6                           | 14<br>14                         | 118<br>84                        | 12<br>13                         |                                  |                                  |                                  |                                  |                            |  | 24          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |  | 25          |
|                                               |                                 |                                  | 4<br>4                           | 6<br>6                           | 6<br>8                           | 18<br>22                         | 92<br>100                        | 13<br>12                         |                                  |                                  |                                  |                                  |                            |  | 26          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |  | 27          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  | 7<br>5                           | 4<br>1                           | 2<br>3                           | 1<br>1                           |                                  |                                  |                            |  | 28          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |  | 29          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  | 5<br>5                           | 4<br>4                           | 4<br>3                           | 2<br>2                           |                                  |                                  |                            |  | 30          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |  | 31          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 11<br>9                          | 39<br>46                         | 6<br>2                           |                                  |                                  |                            |  | 32          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 10<br>40                         | 40<br>40                         | 10<br>10                         |                                  |                                  |                            |  | 33          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |  | 34          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 8<br>2                           | 36<br>22                         | 6<br>14                          | 4                                |                                  |                            |  | 35          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |  | 36          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 24<br>24                         | 18<br>17                         |                                  |                                  |                            |  | 37          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |  | 38          |
|                                               |                                 |                                  |                                  |                                  |                                  | 2<br>2                           | 10<br>9                          | 5<br>4                           | 11<br>10                         | 2                                |                                  |                                  |                            |  | 39          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |  | 40          |
|                                               |                                 |                                  |                                  |                                  |                                  | 2                                | 7<br>15                          | 7<br>5                           | 10<br>11                         | 1<br>1                           |                                  |                                  |                            |  | 41          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |  | 42          |

TABLE B.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER YEARS, 1913 TO 1915—

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |     |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|-----|
|          |                                             |       |                      |                                   |                                 |                                    | 45 and under.                                  | Over 45 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84  |
| 1        | Blowers—Concluded.                          |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |     |
| 2        | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |     |
| 3        | 34 plants.....                              | 1913  | 154                  | 82.2                              | \$0.332                         | \$27.21                            |                                                |                      |                 |    |                      | 23 |                      | 131 |
| 4        |                                             | 1914  | 130                  | 80.5                              | .329                            | 26.42                              |                                                |                      |                 |    | 1                    | 34 | 7                    | 188 |
| 5        | 38 plants.....                              | 1914  | 143                  | 80.7                              | .333                            | 26.74                              |                                                |                      |                 |    | 1                    | 36 | 7                    | 199 |
| 6        |                                             | 1915  | 149                  | 80.6                              | .336                            | 26.93                              |                                                |                      |                 |    | 1                    | 38 | 7                    | 103 |
| 7        | Blowing engineers:                          |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |     |
| 8        | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |     |
| 9        | 6 plants.....                               | 1913  | 20                   | 82.8                              | .199                            | 16.44                              |                                                |                      |                 |    |                      | 2  |                      | 18  |
| 10       |                                             | 1914  | 18                   | 82.7                              | .205                            | 16.97                              |                                                |                      |                 |    |                      | 2  | 1                    | 15  |
| 11       | 6 plants.....                               | 1914  | 18                   | 82.7                              | .209                            | 17.25                              |                                                |                      |                 |    |                      | 2  | 1                    | 15  |
| 12       |                                             | 1915  | 16                   | 82.5                              | .214                            | 17.66                              |                                                |                      |                 |    |                      | 2  | 1                    | 13  |
| 13       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |     |
| 14       | 10 plants.....                              | 1913  | 50                   | 84.0                              | .286                            | 23.99                              |                                                |                      |                 |    |                      |    |                      | 50  |
| 15       |                                             | 1914  | 44                   | 78.9                              | .288                            | 22.68                              |                                                |                      |                 |    |                      | 16 | 6                    | 22  |
| 16       |                                             | 1915  | 48                   | 78.8                              | .287                            | 22.62                              |                                                |                      |                 |    |                      | 18 | 6                    | 24  |
| 17       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |     |
| 18       | 10 plants.....                              | 1913  | 58                   | 79.9                              | .283                            | 22.52                              |                                                |                      |                 |    |                      | 20 |                      | 38  |
| 19       |                                             | 1914  | 48                   | 76.3                              | .280                            | 21.44                              |                                                |                      |                 |    |                      | 30 | 2                    | 16  |
| 20       | 11 plants.....                              | 1914  | 54                   | 75.8                              | .287                            | 21.79                              |                                                |                      |                 |    |                      | 36 | 2                    | 16  |
| 21       |                                             | 1915  | 57                   | 75.6                              | .286                            | 21.62                              |                                                |                      |                 |    |                      | 39 | 2                    | 16  |
| 22       | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |     |
| 23       | 9 plants.....                               | 1913  | 28                   | 82.3                              | .210                            | 17.30                              |                                                |                      |                 |    |                      | 4  |                      | 24  |
| 24       |                                             | 1914  | 29                   | 82.3                              | .212                            | 17.42                              |                                                |                      |                 |    |                      | 4  |                      | 25  |
| 25       | 11 plants.....                              | 1914  | 31                   | 84.0                              | .211                            | 17.69                              |                                                |                      |                 |    |                      |    |                      | 31  |
| 26       |                                             | 1915  | 32                   | 84.0                              | .207                            | 17.42                              |                                                |                      |                 |    |                      |    |                      | 32  |
| 27       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |     |
| 28       | 35 plants.....                              | 1913  | 156                  | 82.0                              | .260                            | 21.28                              |                                                |                      |                 |    |                      | 26 |                      | 130 |
| 29       |                                             | 1914  | 139                  | 79.2                              | .259                            | 20.42                              |                                                |                      |                 |    |                      | 52 | 9                    | 78  |
| 30       | 38 plants.....                              | 1914  | 147                  | 79.3                              | .262                            | 20.64                              |                                                |                      |                 |    |                      | 54 | 9                    | 84  |
| 31       |                                             | 1915  | 153                  | 79.1                              | .262                            | 20.64                              |                                                |                      |                 |    |                      | 59 | 9                    | 85  |
| 32       | Blowing engineers' assistants:              |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |     |
| 33       | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |     |
| 34       | 3 plants.....                               | 1913  | 6                    | 80.0                              | .181                            | 14.49                              |                                                |                      |                 |    |                      | 2  |                      | 4   |
| 35       |                                             | 1914  | 6                    | 80.0                              | .179                            | 14.40                              |                                                |                      |                 |    |                      | 2  |                      | 4   |
| 36       | 3 plants.....                               | 1914  | 6                    | 80.0                              | .172                            | 13.81                              |                                                |                      |                 |    |                      | 2  |                      | 4   |
| 37       |                                             | 1915  | 6                    | 80.0                              | .170                            | 13.58                              |                                                |                      |                 |    |                      | 2  |                      | 4   |
| 38       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |     |
| 39       | 8 plants.....                               | 1913  | 58                   | 84.0                              | .234                            | 19.68                              |                                                |                      |                 |    |                      |    |                      | 58  |
| 40       |                                             | 1914  | 54                   | 77.9                              | .237                            | 18.47                              |                                                |                      |                 |    |                      | 22 | 12                   | 20  |
| 41       |                                             | 1915  | 52                   | 77.2                              | .237                            | 18.32                              |                                                |                      |                 |    |                      | 24 | 12                   | 16  |
| 42       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |     |
| 43       | 4 plants.....                               | 1913  | 16                   | 81.0                              | .238                            | 19.10                              |                                                |                      |                 |    |                      | 4  |                      | 12  |
| 44       |                                             | 1914  | 14                   | 78.9                              | .230                            | 18.07                              |                                                |                      |                 |    |                      | 6  |                      | 8   |
| 45       | 5 plants.....                               | 1914  | 20                   | 76.8                              | .249                            | 18.97                              |                                                |                      |                 |    |                      |    |                      | 8   |
| 46       |                                             | 1915  | 22                   | 76.4                              | .250                            | 18.93                              |                                                |                      |                 |    |                      | 14 |                      | 8   |
| 47       | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |     |
| 48       | 3 plants.....                               | 1913  | 14                   | 84.0                              | .188                            | 15.79                              |                                                |                      |                 |    |                      |    |                      | 14  |
| 49       |                                             | 1914  | 13                   | 84.0                              | .185                            | 15.53                              |                                                |                      |                 |    |                      |    |                      | 13  |
| 50       | 5 plants.....                               | 1914  | 19                   | 84.0                              | .176                            | 14.75                              |                                                |                      |                 |    |                      |    |                      | 19  |
| 51       |                                             | 1915  | 16                   | 84.0                              | .165                            | 13.84                              |                                                |                      |                 |    |                      |    |                      | 16  |
| 52       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |     |
| 53       | 18 plants.....                              | 1913  | 94                   | 83.2                              | .225                            | 18.67                              |                                                |                      |                 |    |                      | 6  |                      | 88  |
| 54       |                                             | 1914  | 87                   | 79.1                              | .224                            | 17.68                              |                                                |                      |                 |    |                      | 30 | 12                   | 45  |
| 55       | 21 plants.....                              | 1914  | 99                   | 79.0                              | .223                            | 17.57                              |                                                |                      |                 |    |                      | 36 | 12                   | 51  |
| 56       |                                             | 1915  | 96                   | 78.3                              | .223                            | 17.41                              |                                                |                      |                 |    |                      | 40 | 12                   | 44  |

<sup>1</sup> Including 2 employees whose full-time hours per week were 91.



HOURLY, AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY  
BLAST FURNACES—Continued.

| Employees whose rates of wages per hour were— |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 8<br>and<br>under<br>9<br>cts.                | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                 |                                  |                                  |                                  |                                  | 2                                | 17                               | 28                               | 88                               | 15                               | 4                                |                                  |                            | 1           |
|                                               |                                 |                                  |                                  |                                  |                                  | 2                                | 14                               | 16                               | 81                               | 17                               |                                  |                                  |                            | 2           |
|                                               |                                 |                                  |                                  |                                  |                                  | 2                                | 12                               | 22                               | 84                               | 23                               |                                  |                                  |                            | 3           |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  | 22                               | 19                               | 78                               | 30                               |                                  |                                  |                            | 4           |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                 |                                  |                                  |                                  |                                  | 14                               | 4                                | 2                                |                                  |                                  |                                  |                                  |                            | 5           |
|                                               |                                 |                                  |                                  |                                  | 1                                | 8                                | 7                                | 2                                |                                  |                                  |                                  |                                  |                            | 6           |
|                                               |                                 |                                  |                                  |                                  | 1                                | 6                                | 9                                | 2                                |                                  |                                  |                                  |                                  |                            | 7           |
|                                               |                                 |                                  |                                  |                                  | 3                                | 2                                | 7                                | 4                                |                                  |                                  |                                  |                                  |                            | 8           |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 36                               | 14                               |                                  |                                  |                                  |                            | 9           |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 30                               | 14                               |                                  |                                  |                                  |                            | 10          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 34                               | 14                               |                                  |                                  |                                  |                            | 11          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  | 16                               | 18                               | 24                               |                                  |                                  |                                  |                            | 12          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  | 18                               | 12                               | 18                               |                                  |                                  |                                  |                            | 13          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  | 18                               | 12                               | 24                               |                                  |                                  |                                  |                            | 14          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  | 18                               | 14                               | 25                               |                                  |                                  |                                  |                            | 15          |
|                                               |                                 |                                  |                                  | 2                                |                                  | 10                               | 15                               | 1                                |                                  |                                  |                                  |                                  |                            | 16          |
|                                               |                                 |                                  |                                  | 2                                |                                  | 10                               | 16                               | 1                                |                                  |                                  |                                  |                                  |                            | 17          |
|                                               |                                 |                                  |                                  |                                  | 4                                | 10                               | 16                               | 1                                |                                  |                                  |                                  |                                  |                            | 18          |
|                                               |                                 |                                  |                                  |                                  | 4                                | 12                               | 15                               | 1                                |                                  |                                  |                                  |                                  |                            | 19          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                 |                                  |                                  | 2                                |                                  | 24                               | 35                               | 57                               | 38                               |                                  |                                  |                                  |                            | 20          |
|                                               |                                 |                                  |                                  | 2                                | 1                                | 18                               | 41                               | 45                               | 32                               |                                  |                                  |                                  |                            | 21          |
|                                               |                                 |                                  |                                  |                                  | 5                                | 16                               | 43                               | 45                               | 38                               |                                  |                                  |                                  |                            | 22          |
|                                               |                                 |                                  |                                  |                                  | 7                                | 14                               | 40                               | 53                               | 39                               |                                  |                                  |                                  |                            | 23          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                 |                                  |                                  |                                  | 4                                |                                  | 2                                |                                  |                                  |                                  |                                  |                                  |                            | 24          |
|                                               |                                 |                                  |                                  |                                  | 4                                |                                  | 2                                |                                  |                                  |                                  |                                  |                                  |                            | 25          |
|                                               |                                 |                                  |                                  |                                  | 6                                |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 26          |
|                                               |                                 |                                  |                                  |                                  | 6                                |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 27          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  | 40                               | 18                               |                                  |                                  |                                  |                                  |                            | 28          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  | 34                               | 20                               |                                  |                                  |                                  |                                  |                            | 29          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  | 32                               | 20                               |                                  |                                  |                                  |                                  |                            | 30          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  | 12                               |                                  | 4                                |                                  |                                  |                                  |                            | 31          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  | 12                               |                                  | 2                                |                                  |                                  |                                  |                            | 32          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  | 12                               | 4                                | 4                                |                                  |                                  |                                  |                            | 33          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  | 13                               | 4                                | 5                                |                                  |                                  |                                  |                            | 34          |
|                                               |                                 |                                  |                                  | 4                                |                                  | 2                                | 8                                |                                  |                                  |                                  |                                  |                                  |                            | 35          |
|                                               |                                 |                                  |                                  | 4                                |                                  | 2                                | 7                                |                                  |                                  |                                  |                                  |                                  |                            | 36          |
|                                               |                                 |                                  |                                  |                                  | 4                                | 6                                |                                  | 7                                |                                  |                                  |                                  |                                  |                            | 37          |
|                                               |                                 |                                  | 2                                | 4                                | 2                                |                                  | 4                                |                                  |                                  |                                  |                                  |                                  |                            | 38          |
|                                               |                                 |                                  | 2                                | 8                                |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                 |                                  |                                  | 4                                | 4                                | 2                                | 62                               | 18                               | 4                                |                                  |                                  |                                  |                            | 39          |
|                                               |                                 |                                  |                                  | 4                                | 6                                |                                  | 55                               | 20                               | 2                                |                                  |                                  |                                  |                            | 40          |
|                                               |                                 |                                  |                                  |                                  | 12                               |                                  | 53                               | 24                               | 4                                |                                  |                                  |                                  |                            | 41          |
|                                               |                                 |                                  | 2                                | 4                                | 8                                |                                  | 49                               | 21                               | 5                                |                                  |                                  |                                  |                            | 42          |

<sup>2</sup> Including 1 employee whose full-time hours per week were 91.

## 102 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

TABLE B.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER YEARS, 1913 TO 1915—

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |     |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|-----|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84  |
|          | Stove tenders:                              |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |     |
| 1        | Eastern—                                    | 1913  | 25                   | 82.1                              | \$0.175                         | \$14.37                            |                                                |                      |                 |    |                      | 4  |                      | 21  |
| 2        | 6 plants. ....                              | 1914  | 22                   | 81.8                              | .174                            | 14.29                              |                                                |                      |                 |    |                      | 4  |                      | 18  |
| 3        | 6 plants. ....                              | 1914  | 22                   | 81.8                              | .177                            | 14.51                              |                                                |                      |                 |    |                      | 4  |                      | 18  |
| 4        |                                             | 1915  | 16                   | 82.5                              | .174                            | 14.43                              |                                                |                      |                 |    |                      | 2  |                      | 14  |
| 5        | Pittsburgh—                                 | 1913  | 92                   | 84.0                              | .222                            | 18.65                              |                                                |                      |                 |    |                      |    |                      | 92  |
| 6        | 10 plants. ....                             | 1914  | 74                   | 78.9                              | .221                            | 17.42                              |                                                |                      |                 |    |                      | 26 | 12                   | 36  |
| 7        |                                             | 1915  | 78                   | 78.8                              | .222                            | 17.50                              |                                                |                      |                 |    |                      | 28 | 12                   | 38  |
| 8        | G. L. and M. W.—                            | 1913  | 67                   | 78.6                              | .229                            | 17.97                              |                                                |                      |                 |    |                      | 30 |                      | 37  |
| 9        | 10 plants. ....                             | 1914  | 50                   | 77.8                              | .224                            | 17.37                              |                                                |                      |                 |    |                      | 26 |                      | 24  |
| 10       | 11 plants. ....                             | 1914  | 54                   | 77.3                              | .224                            | 17.24                              |                                                |                      |                 |    |                      | 30 |                      | 24  |
| 11       |                                             | 1915  | 56                   | 76.3                              | .224                            | 17.02                              |                                                |                      |                 |    |                      | 36 |                      | 20  |
| 12       | Southern—                                   | 1913  | 36                   | 82.7                              | .177                            | 14.66                              |                                                |                      |                 |    |                      | 4  |                      | 3   |
| 13       | 9 plants. ....                              | 1914  | 31                   | 82.5                              | .178                            | 14.70                              |                                                |                      |                 |    |                      | 4  |                      | 27  |
| 14       | 11 plants. ....                             | 1914  | 33                   | 84.0                              | .177                            | 14.86                              |                                                |                      |                 |    |                      |    |                      | 33  |
| 15       |                                             | 1915  | 36                   | 84.0                              | .169                            | 14.22                              |                                                |                      |                 |    |                      |    |                      | 36  |
| 16       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |     |
| 17       | 35 plants. ....                             | 1913  | 220                  | 81.9                              | .211                            | 17.30                              |                                                |                      |                 |    |                      | 38 |                      | 189 |
|          |                                             | 1914  | 177                  | 79.6                              | .209                            | 16.54                              |                                                |                      |                 |    |                      | 60 | 12                   | 103 |
| 18       | 38 plants. ....                             | 1914  | 183                  | 79.7                              | .209                            | 16.56                              |                                                |                      |                 |    |                      | 60 | 12                   | 111 |
| 19       |                                             | 1915  | 186                  | 79.4                              | .208                            | 16.46                              |                                                |                      |                 |    |                      | 66 | 12                   | 108 |
|          | Keepers:                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |     |
| 20       | Eastern—                                    | 1913  | 26                   | 82.2                              | .196                            | 16.08                              |                                                |                      |                 |    |                      | 4  |                      | 22  |
| 21       | 6 plants. ....                              | 1914  | 22                   | 81.8                              | .197                            | 16.08                              |                                                |                      |                 |    |                      | 4  |                      | 18  |
| 22       | 6 plants. ....                              | 1914  | 22                   | 81.8                              | .199                            | 16.27                              |                                                |                      |                 |    |                      | 4  |                      | 18  |
| 23       |                                             | 1915  | 16                   | 82.5                              | .195                            | 16.05                              |                                                |                      |                 |    |                      | 2  |                      | 14  |
| 24       | Pittsburgh—                                 | 1913  | 92                   | 84.0                              | .259                            | 21.73                              |                                                |                      |                 |    |                      |    |                      | 92  |
| 25       | 10 plants. ....                             | 1914  | 74                   | 78.9                              | .259                            | 20.38                              |                                                |                      |                 |    |                      | 26 | 12                   | 36  |
| 26       |                                             | 1915  | 78                   | 78.8                              | .258                            | 20.34                              |                                                |                      |                 |    |                      | 28 | 12                   | 38  |
| 27       | G. L. and M. W.—                            | 1913  | 74                   | 79.1                              | .247                            | 19.56                              |                                                |                      |                 |    |                      | 30 |                      | 44  |
| 28       | 10 plants. ....                             | 1914  | 50                   | 77.8                              | .245                            | 19.06                              |                                                |                      |                 |    |                      | 26 |                      | 24  |
| 29       | 11 plants. ....                             | 1914  | 56                   | 77.1                              | .245                            | 18.89                              |                                                |                      |                 |    |                      | 32 |                      | 24  |
| 30       |                                             | 1915  | 56                   | 76.3                              | .246                            | 18.72                              |                                                |                      |                 |    |                      | 36 |                      | 26  |
| 31       | Southern—                                   | 1913  | 38                   | 82.7                              | .181                            | 15.00                              |                                                |                      |                 |    |                      | 4  |                      | 34  |
| 32       | 9 plants. ....                              | 1914  | 32                   | 82.5                              | .182                            | 15.03                              |                                                |                      |                 |    |                      | 4  |                      | 28  |
| 33       | 11 plants. ....                             | 1914  | 32                   | 84.0                              | .177                            | 14.83                              |                                                |                      |                 |    |                      |    |                      | 32  |
| 34       |                                             | 1915  | 37                   | 84.0                              | .172                            | 14.48                              |                                                |                      |                 |    |                      |    |                      | 37  |
| 35       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |     |
| 36       | 35 plants. ....                             | 1913  | 230                  | 82.0                              | .235                            | 19.28                              |                                                |                      |                 |    |                      | 38 |                      | 192 |
|          |                                             | 1914  | 178                  | 79.6                              | .233                            | 18.52                              |                                                |                      |                 |    |                      | 60 | 12                   | 106 |
| 37       | 38 plants. ....                             | 1914  | 184                  | 79.6                              | .233                            | 18.47                              |                                                |                      |                 |    |                      | 62 | 12                   | 110 |
| 38       |                                             | 1915  | 187                  | 79.4                              | .232                            | 18.33                              |                                                |                      |                 |    |                      | 66 | 12                   | 109 |
|          | Keepers' helpers:                           |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |     |
| 39       | Eastern—                                    | 1913  | 126                  | 82.9                              | .164                            | 13.62                              |                                                |                      |                 |    |                      | 12 |                      | 114 |
| 40       | 6 plants. ....                              | 1914  | 98                   | 82.5                              | .165                            | 13.63                              |                                                |                      |                 |    |                      | 12 |                      | 86  |
| 41       | 6 plants. ....                              | 1914  | 92                   | 82.4                              | .167                            | 13.81                              |                                                |                      |                 |    |                      | 12 |                      | 80  |
| 42       |                                             | 1915  | 68                   | 82.9                              | .161                            | 13.32                              |                                                |                      |                 |    |                      | 6  |                      | 62  |

HOUR, AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY  
 BLAST FURNACES—Continued.

| Employees whose rates of wages per hour were— |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | Line No. |
|-----------------------------------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-------------------|----------|
| 8 and under 9 cts.                            | 9 and under 10 cts. | 10 and under 12 cts. | 12 and under 14 cts. | 14 and under 16 cts. | 16 and under 18 cts. | 18 and under 20 cts. | 20 and under 25 cts. | 25 and under 30 cts. | 30 and under 40 cts. | 40 and under 50 cts. | 50 and under 60 cts. | 60 and under 70 cts. | 70 cts. and over. |          |
|                                               |                     |                      |                      |                      | 18                   | 7                    |                      |                      |                      |                      |                      |                      |                   | 1        |
|                                               |                     |                      |                      |                      | 14                   | 8                    |                      |                      |                      |                      |                      |                      |                   | 2        |
|                                               |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | 3        |
|                                               |                     |                      |                      | 2                    | 12                   | 10                   |                      |                      |                      |                      |                      |                      |                   | 4        |
|                                               |                     |                      |                      |                      | 6                    | 8                    |                      |                      |                      |                      |                      |                      |                   | 5        |
|                                               |                     |                      |                      |                      |                      |                      | 92                   |                      |                      |                      |                      |                      |                   | 6        |
|                                               |                     |                      |                      |                      |                      |                      | 74                   |                      |                      |                      |                      |                      |                   | 7        |
|                                               |                     |                      |                      |                      |                      |                      | 78                   |                      |                      |                      |                      |                      |                   | 8        |
|                                               |                     |                      |                      |                      |                      | 2                    | 65                   |                      |                      |                      |                      |                      |                   | 9        |
|                                               |                     |                      |                      |                      |                      | 2                    | 48                   |                      |                      |                      |                      |                      |                   | 10       |
|                                               |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | 11       |
|                                               |                     |                      |                      |                      |                      | 2                    | 52                   |                      |                      |                      |                      |                      |                   | 12       |
|                                               |                     |                      |                      |                      |                      | 4                    | 52                   |                      |                      |                      |                      |                      |                   | 13       |
|                                               |                     |                      | 4                    | 10                   | 10                   |                      | 12                   |                      |                      |                      |                      |                      |                   | 14       |
|                                               |                     |                      | 4                    | 8                    | 8                    |                      | 11                   |                      |                      |                      |                      |                      |                   | 15       |
|                                               |                     |                      | 4                    | 10                   | 7                    |                      | 12                   |                      |                      |                      |                      |                      |                   | 16       |
|                                               |                     |                      | 2                    | 8                    | 7                    |                      | 11                   |                      |                      |                      |                      |                      |                   | 17       |
|                                               |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | 18       |
|                                               |                     |                      | 4                    | 10                   | 28                   | 9                    | 160                  |                      |                      |                      |                      |                      |                   | 19       |
|                                               |                     |                      | 4                    | 8                    | 22                   | 10                   | 133                  |                      |                      |                      |                      |                      |                   | 20       |
|                                               |                     |                      | 4                    | 10                   | 19                   | 12                   | 138                  |                      |                      |                      |                      |                      |                   | 21       |
|                                               |                     |                      | 2                    | 8                    | 13                   | 12                   | 141                  |                      |                      |                      |                      |                      |                   | 22       |
|                                               |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | 23       |
|                                               |                     |                      |                      |                      |                      | 12                   | 14                   |                      |                      |                      |                      |                      |                   | 24       |
|                                               |                     |                      |                      |                      | 4                    | 3                    | 15                   |                      |                      |                      |                      |                      |                   | 25       |
|                                               |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | 26       |
|                                               |                     |                      |                      |                      | 2                    | 3                    | 17                   |                      |                      |                      |                      |                      |                   | 27       |
|                                               |                     |                      |                      |                      | 2                    | 4                    | 10                   |                      |                      |                      |                      |                      |                   | 28       |
|                                               |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | 29       |
|                                               |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | 30       |
|                                               |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | 31       |
|                                               |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | 32       |
|                                               |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | 33       |
|                                               |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | 34       |
|                                               |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | 35       |
|                                               |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | 36       |
|                                               |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | 37       |
|                                               |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | 38       |
|                                               |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | 39       |
|                                               |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | 40       |
|                                               |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | 41       |
|                                               |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | 42       |

TABLE B.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER YEARS, 1913 TO 1915—

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |     |                      |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|-----|----------------------|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72  | Over 72 and under 84 |
| 1        | Keepers' helpers—Con.                       |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 2        | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 3        | 10 plants.....                              | 1913  | 326                  | 84.0                              | \$0.208                         | \$17.47                            |                                                |                      |                 |    |                      |     | 326                  |
|          |                                             | 1914  | 268                  | 78.9                              | .208                            | 16.39                              |                                                |                      |                 |    |                      | 92  | 48                   |
|          |                                             | 1915  | 252                  | 78.6                              | .208                            | 16.38                              |                                                |                      |                 |    |                      | 96  | 36                   |
| 4        | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 5        | 10 plants.....                              | 1913  | 300                  | 80.4                              | .204                            | 16.35                              |                                                |                      |                 |    |                      | 90  | 210                  |
|          |                                             | 1914  | 184                  | 80.1                              | .203                            | 16.04                              |                                                |                      |                 |    |                      | 74  | 110                  |
| 6        | 11 plants.....                              | 1914  | 208                  | 79.2                              | .204                            | 15.99                              |                                                |                      |                 |    |                      | 98  | 110                  |
| 7        |                                             | 1915  | 210                  | 77.4                              | .202                            | 15.61                              |                                                |                      |                 |    |                      | 116 | 94                   |
| 8        | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 9        | 9 plants.....                               | 1913  | 198                  | 81.5                              | .138                            | 11.24                              |                                                |                      |                 |    |                      | 42  | 156                  |
|          |                                             | 1914  | 145                  | 82.2                              | .139                            | 11.39                              |                                                |                      |                 |    |                      | 22  | 123                  |
| 10       | 11 plants.....                              | 1914  | 166                  | 84.0                              | .136                            | 11.40                              |                                                |                      |                 |    |                      |     | 166                  |
| 11       |                                             | 1915  | 197                  | 84.0                              | .134                            | 11.24                              |                                                |                      |                 |    |                      |     | 197                  |
| 12       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 13       | 35 plants.....                              | 1913  | 950                  | 82.2                              | .186                            | 15.31                              |                                                |                      |                 |    |                      | 144 | 806                  |
|          |                                             | 1914  | 695                  | 80.4                              | .186                            | 14.87                              |                                                |                      |                 |    |                      | 200 | 48                   |
| 14       | 38 plants.....                              | 1914  | 734                  | 80.6                              | .185                            | 14.83                              |                                                |                      |                 |    |                      | 202 | 48                   |
| 15       |                                             | 1915  | 727                  | 80.1                              | .182                            | 14.48                              |                                                |                      |                 |    |                      | 218 | 36                   |
| 16       | Iron handlers and loaders:                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 17       | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
|          | 4 plants.....                               | 1913  | 56                   | 73.6                              | .263                            | 19.02                              |                                                |                      | 10              | 8  | 8                    |     | 30                   |
|          |                                             | 1914  | 54                   | 69.3                              | .200                            | 13.50                              | 18                                             |                      |                 | 6  |                      |     | 30                   |
| 18       | 3 plants.....                               | 1914  | 39                   | 72.0                              | .196                            | 13.66                              | 9                                              |                      |                 | 6  |                      |     | 24                   |
| 19       |                                             | 1915  | 35                   | 75.5                              | .220                            | 16.03                              |                                                |                      | 8               | 3  |                      |     | 24                   |
| 20       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 21       | 2 plants.....                               | 1913  | 32                   | 80.1                              | .270                            | 21.73                              |                                                |                      |                 |    |                      | 18  | 14                   |
|          |                                             | 1914  | 32                   | 84.0                              | .258                            | 21.71                              |                                                |                      |                 |    |                      |     | 32                   |
| 22       | 1 plant.....                                | 1914  | 18                   | 84.0                              | .270                            | 22.66                              |                                                |                      |                 |    |                      |     | 18                   |
| 23       |                                             | 1915  | 18                   | 84.0                              | .278                            | 23.31                              |                                                |                      |                 |    |                      |     | 18                   |
| 24       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 25       | 3 plants.....                               | 1913  | 119                  | 75.7                              | .269                            | 20.49                              |                                                |                      |                 |    | 71                   |     | 48                   |
|          |                                             | 1914  | 105                  | 74.0                              | .266                            | 20.06                              |                                                |                      |                 | 4  | 61                   | 8   | 32                   |
| 26       |                                             | 1915  | 102                  | 73.8                              | .241                            | 18.10                              |                                                |                      |                 | 8  | 54                   | 8   | 32                   |
| 27       | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 28       | 7 plants.....                               | 1913  | 191                  | 68.0                              | .183                            | 12.47                              |                                                |                      | 10              | 34 | 93                   | 32  | 22                   |
|          |                                             | 1914  | 142                  | 67.7                              | .191                            | 12.88                              |                                                |                      | 13              | 27 | 62                   | 20  | 20                   |
| 29       | 9 plants.....                               | 1914  | 143                  | 72.9                              | .183                            | 13.16                              |                                                |                      |                 |    | 96                   |     | 47                   |
| 30       |                                             | 1915  | 168                  | 72.8                              | .171                            | 12.43                              |                                                |                      |                 |    | 117                  |     | 51                   |
| 31       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 32       | 16 plants.....                              | 1913  | 398                  | 72.0                              | .227                            | 16.54                              |                                                |                      | 20              | 42 | 172                  | 32  | 114                  |
|          |                                             | 1914  | 333                  | 71.5                              | .222                            | 16.09                              | 18                                             |                      | 13              | 37 | 123                  | 28  | 114                  |
| 33       | 16 plants.....                              | 1914  | 305                  | 73.8                              | .218                            | 16.16                              | 9                                              |                      |                 |    |                      |     | 121                  |
| 34       |                                             | 1915  | 323                  | 74.0                              | .204                            | 15.22                              |                                                |                      | 8               | 10 | 157                  | 8   | 125                  |
| 35       | Pig-machine men:                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 36       | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
|          | 2 plants.....                               | 1913  | 27                   | 76.0                              | .161                            | 12.26                              |                                                |                      |                 |    |                      | 18  | 9                    |
|          |                                             | 1914  | 15                   | 76.5                              | .161                            | 12.37                              |                                                |                      |                 |    |                      | 10  | 15                   |
| 37       | 3 plants.....                               | 1914  | 23                   | 79.1                              | .163                            | 12.89                              |                                                |                      |                 |    |                      | 10  | 113                  |
| 38       |                                             | 1915  | 19                   | 80.6                              | .160                            | 12.86                              |                                                |                      |                 |    |                      | 6   | 113                  |
| 39       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 40       | 7 plants.....                               | 1913  | 146                  | 84.0                              | .197                            | 16.55                              |                                                |                      |                 |    |                      |     | 146                  |
|          |                                             | 1914  | 96                   | 78.7                              | .198                            | 15.62                              |                                                |                      |                 |    |                      | 32  | 42                   |
| 41       |                                             | 1915  | 116                  | 79.8                              | .195                            | 15.54                              |                                                |                      |                 |    | 2                    | 31  | 17                   |

Including 1 employee whose full-time hours per week were 91.

HOURLY AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY  
BLAST FURNACES—Continued.

| Employees whose rates of wages per hour were— |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 8<br>and<br>under<br>9<br>cts.                | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                 |                                  |                                  |                                  |                                  | 34                               | 292                              |                                  |                                  |                                  |                                  |                                  |                            | 1           |
|                                               |                                 |                                  |                                  |                                  |                                  | 20                               | 248                              |                                  |                                  |                                  |                                  |                                  |                            | 2           |
|                                               |                                 |                                  |                                  |                                  |                                  | 20                               | 232                              |                                  |                                  |                                  |                                  |                                  |                            | 3           |
|                                               |                                 |                                  |                                  |                                  | 8                                | 44                               | 256                              |                                  |                                  |                                  |                                  |                                  |                            | 4           |
|                                               |                                 |                                  |                                  |                                  | 30                               | 30                               | 146                              |                                  |                                  |                                  |                                  |                                  |                            | 5           |
|                                               |                                 |                                  |                                  |                                  | 8                                | 30                               | 170                              |                                  |                                  |                                  |                                  |                                  |                            | 6           |
|                                               |                                 |                                  |                                  |                                  | 10                               | 32                               | 168                              |                                  |                                  |                                  |                                  |                                  |                            | 7           |
|                                               |                                 | 58                               | 28                               | 70                               | 42                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 8           |
|                                               |                                 | 43                               | 26                               | 40                               | 36                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 9           |
|                                               |                                 | 59                               | 36                               | 37                               | 34                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 10          |
|                                               |                                 | 66                               | 68                               | 31                               | 32                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 11          |
|                                               |                                 | 58                               | 28                               | 118                              | 114                              | 84                               | 548                              |                                  |                                  |                                  |                                  |                                  |                            | 12          |
|                                               |                                 | 43                               | 26                               | 68                               | 106                              | 58                               | 394                              |                                  |                                  |                                  |                                  |                                  |                            | 13          |
|                                               |                                 | 59                               | 36                               | 51                               | 112                              | 58                               | 418                              |                                  |                                  |                                  |                                  |                                  |                            | 14          |
|                                               |                                 | 66                               | 68                               | 65                               | 72                               | 56                               | 400                              |                                  |                                  |                                  |                                  |                                  |                            | 15          |
|                                               |                                 |                                  |                                  |                                  |                                  | 10                               | 8                                | 12                               |                                  | 26                               |                                  |                                  |                            | 16          |
|                                               |                                 |                                  |                                  |                                  |                                  | 24                               | 6                                | 15                               | 9                                |                                  |                                  |                                  |                            | 17          |
|                                               |                                 |                                  |                                  |                                  |                                  | 24                               | 6                                |                                  | 9                                |                                  |                                  |                                  |                            | 18          |
|                                               |                                 |                                  |                                  |                                  |                                  | 16                               | 3                                | 8                                |                                  | 8                                |                                  |                                  |                            | 19          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 14                               | 8                                | 10                               |                                  |                                  |                            | 20          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 14                               | 8                                | 10                               |                                  |                                  |                            | 21          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 8                                |                                  | 10                               |                                  |                                  |                            | 22          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 8                                |                                  | 10                               |                                  |                                  |                            | 23          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 76                               |                                  | 43                               |                                  |                                  |                            | 24          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 42                               |                                  | 44                               |                                  |                                  |                            | 25          |
|                                               |                                 |                                  |                                  |                                  | 35                               | 8                                | 15                               | 16                               |                                  | 28                               |                                  |                                  |                            | 26          |
|                                               |                                 |                                  |                                  | 12                               | 84                               | 20                               | 75                               |                                  |                                  |                                  |                                  |                                  |                            | 27          |
|                                               |                                 |                                  | 8                                | 8                                | 50                               | 12                               | 54                               | 10                               |                                  |                                  |                                  |                                  |                            | 28          |
|                                               |                                 | 17                               | 11                               | 25                               | 18                               | 18                               | 44                               | 10                               |                                  |                                  |                                  |                                  |                            | 29          |
|                                               |                                 | 14                               | 32                               | 10                               | 44                               | 26                               | 42                               |                                  |                                  |                                  |                                  |                                  |                            | 30          |
|                                               |                                 |                                  |                                  | 12                               | 94                               | 28                               | 177                              | 8                                | 79                               |                                  |                                  |                                  |                            | 31          |
|                                               |                                 |                                  | 8                                | 8                                | 74                               | 37                               | 125                              | 27                               | 54                               |                                  |                                  |                                  |                            | 32          |
|                                               |                                 | 17                               | 11                               | 25                               | 42                               | 43                               | 94                               | 19                               | 54                               |                                  |                                  |                                  |                            | 33          |
|                                               |                                 | 14                               | 32                               | 10                               | 95                               | 37                               | 73                               | 16                               | 46                               |                                  |                                  |                                  |                            | 34          |
|                                               |                                 |                                  |                                  | 10                               | 17                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 35          |
|                                               |                                 |                                  |                                  | 6                                | 9                                |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 36          |
|                                               |                                 |                                  |                                  | 6                                | 17                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 37          |
|                                               |                                 |                                  |                                  | 10                               | 9                                |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 38          |
|                                               |                                 |                                  |                                  |                                  | 8                                | 62                               | 76                               |                                  |                                  |                                  |                                  |                                  |                            | 39          |
|                                               |                                 |                                  |                                  |                                  | 2                                | 40                               | 54                               |                                  |                                  |                                  |                                  |                                  |                            | 40          |
|                                               |                                 |                                  |                                  |                                  | 14                               | 52                               | 50                               |                                  |                                  |                                  |                                  |                                  |                            | 41          |

TABLE B.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER YEARS, 1913 TO 1915—

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |     |                      |     |                      |       |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-----|----------------------|-----|----------------------|-------|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60  | Over 60 and under 72 | 72  | Over 72 and under 84 | 84    |
|          | Pig-machine men—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |       |
|          | Concluded.                                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |       |
| 1        | G. L. and M. W.—                            | 1913  | 110                  | 80.3                              | \$0.199                         | \$16.01                            |                                                |                      |                 | 1   |                      | 3   |                      | 77    |
| 2        | 8 plants.....                               | 1914  | 100                  | 79.4                              | .200                            | 15.89                              |                                                |                      |                 | 1   |                      | 36  |                      | 63    |
| 3        | 9 plants.....                               | 1914  | 115                  | 78.5                              | .200                            | 15.68                              |                                                |                      |                 | 1   |                      | 51  |                      | 63    |
| 4        |                                             | 1915  | 84                   | 77.7                              | .200                            | 15.52                              |                                                |                      |                 | 1   |                      | 42  |                      | 41    |
| 5        | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |       |
| 6        | 2 plants.....                               | 1913  | 20                   | 84.0                              | .151                            | 12.72                              |                                                |                      |                 |     |                      |     |                      | 20    |
| 7        |                                             | 1914  | 25                   | 84.0                              | .155                            | 12.99                              |                                                |                      |                 |     |                      |     |                      | 25    |
|          |                                             | 1915  | 26                   | 84.0                              | .156                            | 13.08                              |                                                |                      |                 |     |                      |     |                      | 26    |
| 8        | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |       |
| 9        | 19 plants.....                              | 1913  | 303                  | 81.9                              | .192                            | 15.72                              |                                                |                      |                 | 1   |                      | 50  |                      | 252   |
|          |                                             | 1914  | 236                  | 79.4                              | .192                            | 15.25                              |                                                |                      |                 | 1   |                      | 78  | 22                   | 1 135 |
| 10       | 21 plants.....                              | 1914  | 259                  | 79.2                              | .192                            | 15.15                              |                                                |                      |                 | 1   |                      | 93  | 22                   | 1 143 |
| 11       |                                             | 1915  | 245                  | 79.6                              | .190                            | 15.07                              |                                                |                      |                 | 1   | 2                    | 79  | 17                   | 1 146 |
|          | Cinder men:                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |       |
| 12       | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |       |
| 13       | 5 plants.....                               | 1913  | 35                   | 82.4                              | .154                            | 12.71                              |                                                |                      |                 |     |                      | 4   | 1                    | 30    |
|          |                                             | 1914  | 25                   | 81.5                              | .157                            | 12.80                              |                                                |                      |                 |     | 1                    | 4   |                      | 20    |
| 14       | 5 plants.....                               | 1914  | 28                   | 82.3                              | .157                            | 12.96                              |                                                |                      |                 |     |                      | 4   |                      | 24    |
| 15       |                                             | 1915  | 27                   | 82.7                              | .153                            | 12.62                              |                                                |                      |                 |     |                      | 3   |                      | 24    |
| 16       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |       |
| 17       | 8 plants.....                               | 1913  | 135                  | 80.7                              | .194                            | 15.62                              |                                                |                      |                 |     | 25                   | 1   | 24                   | 85    |
|          |                                             | 1914  | 98                   | 76.2                              | .194                            | 14.73                              |                                                |                      |                 | 4   | 3                    | 52  |                      | 39    |
| 18       | 6 plants.....                               | 1914  | 94                   | 76.3                              | .192                            | 14.61                              |                                                |                      |                 | 4   |                      | 52  |                      | 38    |
| 19       |                                             | 1915  | 91                   | 77.0                              | .193                            | 14.80                              |                                                |                      | 3               |     |                      | 47  |                      | 41    |
| 20       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |       |
| 21       | 10 plants.....                              | 1913  | 138                  | 79.4                              | .192                            | 15.17                              |                                                |                      |                 | 1   | 15                   | 34  | 1                    | 87    |
|          |                                             | 1914  | 99                   | 79.6                              | .190                            | 15.06                              |                                                |                      |                 | 4   | 11                   | 16  | 1                    | 67    |
| 22       | 11 plants.....                              | 1914  | 105                  | 79.1                              | .190                            | 15.04                              |                                                |                      |                 | 4   | 11                   | 22  | 1                    | 67    |
| 23       |                                             | 1915  | 82                   | 79.2                              | .189                            | 14.95                              |                                                |                      | 6               | 4   | 2                    | 10  |                      | 60    |
| 24       | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |       |
| 25       | 8 plants.....                               | 1913  | 49                   | 80.5                              | .146                            | 11.66                              |                                                |                      |                 | 6   | 2                    |     |                      | 41    |
|          |                                             | 1914  | 63                   | 77.7                              | .140                            | 10.86                              |                                                |                      |                 | 2   | 25                   |     |                      | 33    |
| 26       | 9 plants.....                               | 1914  | 59                   | 78.1                              | .135                            | 10.60                              |                                                |                      |                 |     | 25                   |     |                      | 31    |
| 27       |                                             | 1915  | 54                   | 78.3                              | .130                            | 10.22                              |                                                |                      |                 |     | 22                   |     |                      | 32    |
| 28       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |       |
| 29       | 31 plants.....                              | 1913  | 357                  | 80.3                              | .183                            | 14.62                              |                                                |                      |                 | 7   | 42                   | 39  | 26                   | 243   |
|          |                                             | 1914  | 285                  | 78.2                              | .177                            | 13.82                              |                                                |                      |                 | 10  | 40                   | 72  | 1                    | 162   |
| 30       | 31 plants.....                              | 1914  | 286                  | 78.3                              | .176                            | 13.78                              |                                                |                      |                 |     | 8                    | 36  | 78                   | 1 163 |
| 31       |                                             | 1915  | 254                  | 78.6                              | .174                            | 13.64                              |                                                |                      | 9               | 4   | 24                   | 60  |                      | 157   |
|          | Laborers:                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |       |
| 32       | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |       |
| 33       | 6 plants.....                               | 1913  | 129                  | 69.0                              | .151                            | 10.35                              |                                                |                      |                 | 67  | 15                   |     | 15                   | 1 32  |
|          |                                             | 1914  | 122                  | 67.4                              | .150                            | 10.20                              |                                                |                      |                 | 82  | 4                    |     | 1                    | 35    |
| 34       | 6 plants.....                               | 1914  | 100                  | 68.7                              | .153                            | 10.58                              |                                                |                      |                 | 60  | 6                    |     | 1                    | 33    |
| 35       |                                             | 1915  | 53                   | 70.0                              | .151                            | 10.64                              |                                                | 2                    |                 | 22  | 11                   |     |                      | 18    |
| 36       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |       |
| 37       | 10 plants.....                              | 1913  | 351                  | 78.4                              | .191                            | 15.00                              |                                                |                      | 1               | 23  | 62                   | 34  | 15                   | 216   |
| 38       |                                             | 1914  | 294                  | 73.1                              | .192                            | 14.04                              |                                                |                      | 4               | 36  | 36                   | 128 | 20                   | 70    |
| 39       |                                             | 1915  | 266                  | 74.9                              | .189                            | 14.17                              |                                                |                      | 15              | 6   | 30                   | 113 | 16                   | 86    |
| 40       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |       |
| 41       | 9 plants.....                               | 1913  | 442                  | 73.0                              | .189                            | 13.72                              |                                                |                      | 1               | 105 | 105                  | 62  | 34                   | 1 135 |
|          |                                             | 1914  | 397                  | 70.6                              | .190                            | 13.36                              |                                                |                      | 1               | 157 | 23                   | 93  | 17                   | 106   |
| 42       | 11 plants.....                              | 1914  | 489                  | 68.9                              | .190                            | 13.04                              |                                                |                      | 1               | 237 | 24                   | 104 | 17                   | 106   |
|          |                                             | 1915  | 322                  | 67.5                              | .187                            | 12.65                              |                                                | 1                    | 4               | 169 | 27                   | 57  | 14                   | 50    |

<sup>1</sup> Including 1 employee whose full-time hours per week were 91.

HOURLY AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY  
BLAST FURNACES—Continued.

| Employees whose rates of wages per hour were— |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 8<br>and<br>under<br>9<br>cts.                | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                 |                                  |                                  |                                  | 7                                | 32                               | 71                               |                                  |                                  |                                  |                                  |                                  |                            | 1           |
|                                               |                                 |                                  |                                  |                                  | 7                                | 25                               | 68                               |                                  |                                  |                                  |                                  |                                  |                            | 2           |
|                                               |                                 |                                  |                                  |                                  | 7                                | 33                               | 75                               |                                  |                                  |                                  |                                  |                                  |                            | 3           |
|                                               |                                 |                                  |                                  |                                  | 7                                | 28                               | 49                               |                                  |                                  |                                  |                                  |                                  |                            | 4           |
|                                               |                                 |                                  | 8                                |                                  | 12                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 5           |
|                                               |                                 |                                  | 8                                |                                  | 17                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 6           |
|                                               |                                 |                                  | 8                                |                                  | 18                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 7           |
|                                               |                                 |                                  | 8                                | 10                               | 44                               | 94                               | 147                              |                                  |                                  |                                  |                                  |                                  |                            | 8           |
|                                               |                                 |                                  | 8                                | 6                                | 35                               | 65                               | 122                              |                                  |                                  |                                  |                                  |                                  |                            | 9           |
|                                               |                                 |                                  | 8                                | 6                                | 43                               | 73                               | 129                              |                                  |                                  |                                  |                                  |                                  |                            | 10          |
|                                               |                                 |                                  | 8                                | 10                               | 48                               | 80                               | 99                               |                                  |                                  |                                  |                                  |                                  |                            | 11          |
|                                               |                                 |                                  |                                  | 29                               | 6                                |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 12          |
|                                               |                                 |                                  |                                  | 11                               | 14                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 13          |
|                                               |                                 |                                  |                                  | 12                               | 16                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 14          |
|                                               |                                 |                                  |                                  | 19                               | 8                                |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 15          |
|                                               |                                 |                                  |                                  |                                  |                                  | 61                               | 71                               | 3                                |                                  |                                  |                                  |                                  |                            | 16          |
|                                               |                                 |                                  |                                  |                                  |                                  | 49                               | 46                               | 3                                |                                  |                                  |                                  |                                  |                            | 17          |
|                                               |                                 |                                  |                                  |                                  |                                  | 48                               | 46                               |                                  |                                  |                                  |                                  |                                  |                            | 18          |
|                                               |                                 |                                  |                                  |                                  |                                  | 42                               | 49                               |                                  |                                  |                                  |                                  |                                  |                            | 19          |
|                                               |                                 |                                  |                                  |                                  | 23                               | 74                               | 41                               |                                  |                                  |                                  |                                  |                                  |                            | 20          |
|                                               |                                 |                                  |                                  |                                  | 21                               | 51                               | 27                               |                                  |                                  |                                  |                                  |                                  |                            | 21          |
|                                               |                                 |                                  |                                  |                                  | 21                               | 51                               | 33                               |                                  |                                  |                                  |                                  |                                  |                            | 22          |
|                                               |                                 |                                  |                                  |                                  | 27                               | 36                               | 19                               |                                  |                                  |                                  |                                  |                                  |                            | 23          |
|                                               |                                 | 8                                | 14                               | 13                               | 12                               |                                  | 2                                |                                  |                                  |                                  |                                  |                                  |                            | 24          |
| 2                                             |                                 | 6                                | 25                               | 20                               | 8                                |                                  | 2                                |                                  |                                  |                                  |                                  |                                  |                            | 25          |
|                                               |                                 | 6                                | 27                               | 26                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 26          |
|                                               |                                 | 6                                | 39                               | 9                                |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 27          |
|                                               |                                 | 8                                | 14                               | 42                               | 41                               | 135                              | 114                              | 3                                |                                  |                                  |                                  |                                  |                            | 28          |
| 2                                             |                                 | 6                                | 25                               | 31                               | 43                               | 100                              | 75                               | 3                                |                                  |                                  |                                  |                                  |                            | 29          |
|                                               |                                 | 6                                | 27                               | 38                               | 37                               | 99                               | 79                               |                                  |                                  |                                  |                                  |                                  |                            | 30          |
|                                               |                                 | 6                                | 39                               | 28                               | 35                               | 78                               | 68                               |                                  |                                  |                                  |                                  |                                  |                            | 31          |
|                                               |                                 |                                  |                                  | 104                              | 25                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 32          |
|                                               |                                 |                                  | 4                                | 84                               | 34                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 33          |
|                                               |                                 |                                  | 2                                | 62                               | 36                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 34          |
|                                               |                                 |                                  | 12                               | 18                               | 23                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 35          |
|                                               |                                 |                                  |                                  |                                  | 83                               | 175                              | 93                               |                                  |                                  |                                  |                                  |                                  |                            | 36          |
|                                               |                                 |                                  |                                  |                                  | 54                               | 182                              | 58                               |                                  |                                  |                                  |                                  |                                  |                            | 37          |
|                                               |                                 |                                  |                                  | 8                                | 65                               | 127                              | 66                               |                                  |                                  |                                  |                                  |                                  |                            | 38          |
|                                               |                                 |                                  |                                  |                                  | 53                               | 324                              | 65                               |                                  |                                  |                                  |                                  |                                  |                            | 39          |
|                                               |                                 |                                  |                                  |                                  | 63                               | 222                              | 112                              |                                  |                                  |                                  |                                  |                                  |                            | 40          |
|                                               |                                 |                                  |                                  |                                  | 63                               | 314                              | 112                              |                                  |                                  |                                  |                                  |                                  |                            | 41          |
|                                               |                                 |                                  |                                  |                                  | 82                               | 193                              | 47                               |                                  |                                  |                                  |                                  |                                  |                            | 42          |

TABLE B.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER YEARS, 1913 TO 1915—

| Line No. | Occupation, district, and number of plants.                   | Year. | Number of employ-ees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |     |                      |     |                      |       |
|----------|---------------------------------------------------------------|-------|-----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-----|----------------------|-----|----------------------|-------|
|          |                                                               |       |                       |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60  | Over 60 and under 72 | 72  | Over 72 and under 84 | 84    |
| 1        | Laborers—Concluded.<br>Southern—<br>9 plants.....             | 1913  | 271                   | 65.7                              | \$0.136                         | \$8.94                             |                                                |                      |                 | 147 | 80                   | 26  |                      | 18    |
|          |                                                               | 1914  | 197                   | 70.0                              | .139                            | 9.80                               |                                                |                      |                 | 42  | 48                   | 36  | 40                   | 31    |
| 3        | 10 plants.....                                                | 1914  | 213                   | 73.1                              | .137                            | 10.11                              |                                                |                      |                 | 46  | 67                   |     | 40                   | 60    |
|          |                                                               | 1915  | 244                   | 72.7                              | .134                            | 9.79                               |                                                |                      |                 | 61  | 76                   |     | 34                   | 73    |
| 5        | Total—<br>34 plants.....                                      | 1913  | 1,193                 | 72.5                              | .173                            | 12.65                              |                                                |                      | 2               | 342 | 262                  | 122 | 64                   | 1 401 |
|          |                                                               | 1914  | 1,010                 | 70.8                              | .176                            | 12.47                              |                                                |                      | 5               | 317 | 111                  | 257 | 78                   | 242   |
| 7        | 37 plants.....                                                | 1914  | 1,096                 | 70.8                              | .177                            | 12.52                              |                                                |                      | 5               | 379 | 133                  | 232 | 78                   | 269   |
|          |                                                               | 1915  | 885                   | 71.3                              | .171                            | 12.20                              |                                                | 3                    | 19              | 258 | 144                  | 170 | 64                   | 227   |
| 9        | Unclassified—produc-<br>tive:<br>Eastern—<br>6 plants.....    | 1914  | 138                   | 76.6                              | .183                            | 13.99                              |                                                | 4                    |                 | 14  | 10                   | 26  | 16                   | 68    |
|          |                                                               | 1915  | 122                   | 75.9                              | .181                            | 13.63                              |                                                | 6                    |                 | 12  | 10                   | 18  | 23                   | 1 53  |
| 11       | Pittsburgh—<br>10 plants.....                                 | 1914  | 452                   | 76.4                              | .229                            | 17.56                              |                                                |                      | 6               | 29  | 35                   | 151 | 51                   | 180   |
|          |                                                               | 1915  | 440                   | 75.0                              | .234                            | 17.44                              |                                                |                      | 15              | 50  | 31                   | 136 | 48                   | 160   |
| 13       | G. L. and M. W.—<br>11 plants.....                            | 1914  | 370                   | 76.7                              | .234                            | 17.83                              |                                                |                      | 10              | 32  | 26                   | 103 | 9                    | 199   |
|          |                                                               | 1915  | 364                   | 75.2                              | .233                            | 17.50                              |                                                |                      | 11              | 48  | 41                   | 95  | 6                    | 2 163 |
| 15       | Southern—<br>10 plants.....                                   | 1914  | 180                   | 77.6                              | .161                            | 12.34                              |                                                |                      |                 | 22  | 41                   | 1   | 3                    | 113   |
|          |                                                               | 1915  | 226                   | 76.9                              | .163                            | 12.42                              |                                                |                      |                 | 28  | 62                   | 2   | 3                    | 131   |
| 17       | Total—<br>37 plants.....                                      | 1914  | 1,140                 | 76.7                              | .214                            | 16.39                              |                                                | 4                    | 16              | 97  | 112                  | 281 | 79                   | 551   |
|          |                                                               | 1915  | 1,152                 | 75.5                              | .214                            | 16.07                              |                                                | 6                    | 26              | 138 | 144                  | 251 | 80                   | 3 507 |
| 19       | Unclassified—nonpro-<br>ductive:<br>Eastern—<br>6 plants..... | 1914  | 336                   | 72.1                              | .187                            | 13.27                              |                                                | 37                   |                 | 78  | 8                    | 33  | 57                   | 123   |
|          |                                                               | 1915  | 251                   | 70.6                              | .187                            | 13.04                              |                                                | 34                   | 29              | 44  | 9                    | 27  | 19                   | 2 89  |
| 21       | Pittsburgh—<br>10 plants.....                                 | 1914  | 785                   | 71.5                              | .238                            | 16.83                              | 1                                              | 1                    | 33              | 221 | 97                   | 141 | 80                   | 4 211 |
|          |                                                               | 1915  | 756                   | 72.1                              | .235                            | 16.76                              | 1                                              |                      | 38              | 197 | 71                   | 149 | 82                   | 2 218 |
| 23       | G. L. and M. W.—<br>11 plants.....                            | 1914  | 1,152                 | 67.2                              | .239                            | 15.94                              | 1                                              |                      | 322             | 239 | 135                  | 266 | 22                   | 2 167 |
|          |                                                               | 1915  | 989                   | 68.3                              | .244                            | 16.47                              | 1                                              | 1                    | 236             | 215 | 118                  | 210 | 21                   | 187   |
| 25       | Southern—<br>11 plants.....                                   | 1914  | 528                   | 74.4                              | .190                            | 14.05                              | 2                                              |                      |                 | 123 | 129                  |     | 28                   | 246   |
|          |                                                               | 1915  | 501                   | 74.1                              | .188                            | 13.84                              | 2                                              |                      |                 | 131 | 109                  | 2   | 27                   | 2 230 |
| 27       | Total—<br>38 plants.....                                      | 1914  | 2,801                 | 70.4                              | .223                            | 15.51                              | 4                                              | 38                   | 355             | 661 | 369                  | 440 | 187                  | 5 747 |
|          |                                                               | 1915  | 2,497                 | 70.9                              | .224                            | 15.69                              | 4                                              | 35                   | 303             | 587 | 307                  | 388 | 149                  | 2 724 |

<sup>1</sup> Including 2 employees whose full-time hours per week were 91.<sup>2</sup> Including 1 employee whose full-time hours per week were 91.<sup>3</sup> Including 3 employees whose full-time hours per week were 91.



HOUR, AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY  
BLAST FURNACES—Concluded.

| Employees whose rates of wages per hour were— |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 8<br>and<br>under<br>9<br>cts.                | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                 | 10                               | 155                              | 55                               | 51                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 1           |
|                                               |                                 | 5                                | 90                               | 62                               | 40                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 2           |
|                                               |                                 | 26                               | 86                               | 61                               | 40                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 3           |
|                                               |                                 | 41                               | 98                               | 69                               | 36                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 4           |
|                                               |                                 | 10                               | 155                              | 159                              | 212                              | 499                              | 158                              |                                  |                                  |                                  |                                  |                                  |                            | 5           |
|                                               |                                 | 5                                | 94                               | 146                              | 191                              | 404                              | 170                              |                                  |                                  |                                  |                                  |                                  |                            | 6           |
|                                               |                                 | 26                               | 88                               | 123                              | 193                              | 496                              | 170                              |                                  |                                  |                                  |                                  |                                  |                            | 7           |
|                                               |                                 | 41                               | 110                              | 95                               | 206                              | 320                              | 113                              |                                  |                                  |                                  |                                  |                                  |                            | 8           |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                 |                                  | 1                                | 17                               | 63                               | 25                               | 25                               | 4                                | 3                                |                                  |                                  |                                  |                            | 9           |
|                                               |                                 |                                  | 3                                | 32                               | 37                               | 19                               | 25                               | 4                                | 2                                |                                  |                                  |                                  |                            | 10          |
|                                               |                                 |                                  |                                  |                                  | 24                               | 61                               | 237                              | 90                               | 38                               |                                  |                                  |                                  |                            | 11          |
|                                               |                                 |                                  |                                  |                                  | 6                                | 53                               | 243                              | 91                               | 45                               |                                  | 2                                |                                  |                            | 12          |
|                                               |                                 |                                  |                                  |                                  | 8                                | 98                               | 151                              | 48                               | 63                               | 2                                |                                  |                                  |                            | 13          |
|                                               |                                 |                                  |                                  |                                  | 35                               | 78                               | 142                              | 45                               | 63                               | 1                                |                                  |                                  |                            | 14          |
|                                               |                                 | 18                               | 37                               | 37                               | 46                               | 12                               | 19                               | 11                               |                                  |                                  |                                  |                                  |                            | 15          |
|                                               |                                 | 26                               | 37                               | 43                               | 60                               | 23                               | 22                               | 14                               | 1                                |                                  |                                  |                                  |                            | 16          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                 | 18                               | 38                               | 54                               | 141                              | 196                              | 432                              | 153                              | 104                              | 2                                | 2                                |                                  |                            | 17          |
|                                               |                                 | 26                               | 40                               | 75                               | 138                              | 173                              | 432                              | 154                              | 111                              | 1                                | 2                                |                                  |                            | 18          |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                 |                                  | 7                                | 48                               | 134                              | 69                               | 38                               | 26                               | 14                               |                                  |                                  |                                  |                            | 19          |
|                                               |                                 |                                  | 10                               | 59                               | 73                               | 47                               | 27                               | 23                               | 12                               |                                  |                                  |                                  |                            | 20          |
|                                               |                                 |                                  |                                  |                                  | 11                               | 106                              | 414                              | 136                              | 110                              | 8                                |                                  |                                  |                            | 21          |
|                                               |                                 |                                  |                                  |                                  | 1                                | 137                              | 390                              | 129                              | 89                               | 9                                | 1                                |                                  |                            | 22          |
|                                               |                                 |                                  |                                  |                                  | 20                               | 253                              | 479                              | 219                              | 156                              | 23                               | 1                                |                                  |                            | 23          |
|                                               |                                 |                                  |                                  |                                  | 23                               | 158                              | 397                              | 233                              | 159                              | 17                               | 1                                |                                  |                            | 24          |
|                                               |                                 |                                  |                                  |                                  | 97                               | 26                               | 116                              | 39                               | 54                               |                                  |                                  |                                  |                            | 25          |
| 2                                             | 2                               | 47                               | 81                               | 66                               | 98                               | 25                               | 106                              | 35                               | 50                               |                                  |                                  |                                  |                            | 26          |
|                                               |                                 | 54                               | 89                               | 51                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               | 2                               | 47                               | 88                               | 114                              | 262                              | 454                              | 1,047                            | 420                              | 334                              | 31                               | 1                                |                                  |                            | 27          |
|                                               |                                 | 54                               | 90                               | 110                              | 195                              | 367                              | 920                              | 420                              | 310                              | 26                               | 2                                |                                  | 1                          | 28          |

<sup>4</sup> Including 10 employees whose full-time hours per week were 91 and 1 employee whose full-time hours per week were 98.

<sup>5</sup> Including 11 employees whose full-time hours per week were 91 and 1 employee whose full-time hours per week were 93.

## BESSEMER CONVERTERS.<sup>1</sup>

### SUMMARY.

In 1915 the average rate of wages or earnings per hour of employees in the Bessemer converting department ranged from 12 per cent lower to 12 per cent higher than in the years of the period 1907 to 1914. Wages per hour were highest in 1913, owing to the large tonnages made, and the fact that in so many of the occupations earnings are based on production.

In 1914 and 1915 Bessemer production, not taking into account Bessemer duplexing, was greatly reduced.

The most significant facts concerning the several occupations of the Bessemer converting department appearing in this report are summarized in Table 16. Data are presented for the years 1907 to 1915, inclusive, the figures for each group of years being for identical plants. The data for 1915 represent 1,187 Bessemer converter employees in 19 selected occupations and 1,031 employees in unclassified occupations, making a total of 2,218 employees. Employees other than those in the selected occupations are included in the reports for 1914 and 1915 only.

These data were obtained from 12 plants having 32 converters and capable of producing about two-thirds of the tonnage of Bessemer steel ingots made in the United States.

In this table occupations are grouped according to the wages paid, beginning with the lowest-paid group, and the occupations in each group are presented in alphabetical order. Classified full-time hours per week and rates of wages per hour are shown by percentages which were computed from the actual figures given in Table C.

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<sup>1</sup> Summary figures relating to the Bessemer converting department are given with figures for other departments of the iron and steel industry on pages 7 to 26; an account of the volume of employment in this and other departments from July, 1913, to June, 1915, is given on pages 26 to 55; and an explanation of the scope of the investigation and of the methods employed is given on pages 55 to 59.

TABLE 16.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1907 TO 1915—BESSEMER CONVERTERS.

[The figures for each group of years are for identical plants.]

| Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |    |                      | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                      | Average full-time weekly earnings. |                      |
|-----------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|----------------------|----|----------------------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|----------------------|------------------------------------|----------------------|
|                                   |       |                      |                                   | 48 and under.                                              | Over 48 and under 72 | 72 | Over 72 and under 84 |                                 | 84                                                  | 12 and under 14 cts. | 14 and under 16 cts. | 16 and under 18 cts. | 18 and under 20 cts. |                                    | 20 and under 25 cts. |
|                                   |       |                      |                                   |                                                            |                      |    |                      |                                 |                                                     |                      |                      |                      |                      |                                    |                      |
| Laborers:                         |       |                      |                                   |                                                            |                      |    |                      |                                 |                                                     |                      |                      |                      |                      |                                    |                      |
| 9 plants . . . . .                | 1907  | 801                  | 78.0                              |                                                            | 3                    | 22 | 33                   | 42                              | \$0.155                                             |                      | 71                   | 29                   |                      |                                    | \$12.12              |
|                                   | 1908  | 425                  | 76.2                              |                                                            | 14                   | 31 | 22                   | 34                              | .155                                                |                      | 77                   | 23                   |                      |                                    | 11.80                |
|                                   | 1909  | 564                  | 76.9                              |                                                            | 6                    | 25 | 39                   | 30                              | .151                                                | 16                   | 55                   | 29                   |                      |                                    | 11.62                |
|                                   | 1910  | 748                  | 78.1                              |                                                            | 5                    | 32 | 20                   | 1                               | .163                                                |                      | 27                   | 73                   |                      |                                    | 12.69                |
| 10 plants . . . . .               | 1910  | 786                  | 77.8                              |                                                            | 5                    | 35 | 20                   | 1                               | .163                                                |                      | 26                   | 74                   |                      |                                    | 12.69                |
|                                   | 1911  | 593                  | 74.6                              |                                                            | 9                    | 43 | 36                   | 12                              | .166                                                |                      | 18                   | 82                   |                      |                                    | 12.39                |
|                                   | 1912  | 626                  | 75.7                              |                                                            | 8                    | 39 | 28                   | 26                              | .167                                                |                      | 8                    | 92                   |                      |                                    | 12.64                |
| 10 plants . . . . .               | 1912  | 620                  | 75.8                              |                                                            | 8                    | 38 | 27                   | 27                              | .167                                                |                      | 7                    | 93                   |                      |                                    | 12.68                |
|                                   | 1913  | 681                  | 75.1                              |                                                            | 7                    | 40 | 33                   | 20                              | .192                                                |                      | 20                   | 52                   | 28                   |                                    | 14.38                |
| 10 plants . . . . .               | 1913  | 575                  | 75.2                              |                                                            | 9                    | 36 | 33                   | 23                              | .192                                                |                      | 20                   | 52                   | 28                   |                                    | 14.43                |
|                                   | 1914  | 450                  | 75.7                              |                                                            | 6                    | 48 | 16                   | 29                              | .192                                                |                      | 18                   | 59                   | 23                   |                                    | 14.57                |
| 12 plants . . . . .               | 1914  | 546                  | 74.0                              |                                                            | 15                   | 47 | 13                   | 24                              | .193                                                |                      | 15                   | 56                   | 29                   |                                    | 14.27                |
|                                   | 1915  | 496                  | 74.3                              |                                                            | 17                   | 45 | 10                   | 28                              | .193                                                |                      | 14                   | 61                   | 25                   |                                    | 14.31                |
|                                   |       |                      |                                   |                                                            |                      |    |                      |                                 |                                                     |                      | Under 16 cts.        | 16 and under 20 cts. | 20 and under 30 cts. | 30 and under 40 cts.               | 40 cts. and over.    |
| Bottom makers' helpers:           |       |                      |                                   |                                                            |                      |    |                      |                                 |                                                     |                      |                      |                      |                      |                                    |                      |
| 9 plants . . . . .                | 1907  | 30                   | 73.5                              |                                                            | 27                   | 47 | 27                   |                                 | .257                                                |                      | 27                   | 47                   | 13                   | 13                                 | 18.82                |
|                                   | 1908  | 27                   | 72.2                              |                                                            | 26                   | 67 | 7                    |                                 | .204                                                | 15                   | 37                   | 33                   | 15                   |                                    | 14.75                |
|                                   | 1909  | 29                   | 73.1                              |                                                            | 28                   | 52 | 21                   |                                 | .234                                                | 7                    | 35                   | 38                   | 14                   | 7                                  | 17.08                |
|                                   | 1910  | 30                   | 72.9                              |                                                            |                      | 87 | 7                    | 7                               | .239                                                |                      | 37                   | 50                   | 13                   |                                    | 17.38                |
| 10 plants . . . . .               | 1910  | 34                   | 72.8                              |                                                            |                      | 88 | 6                    | 6                               | .235                                                |                      | 38                   | 50                   | 12                   |                                    | 17.10                |
|                                   | 1911  | 31                   | 72.2                              |                                                            | 32                   | 65 |                      | 3                               | .234                                                | 3                    | 39                   | 39                   | 19                   |                                    | 16.88                |
|                                   | 1912  | 31                   | 72.2                              |                                                            | 32                   | 61 | 7                    |                                 | .238                                                | 7                    | 36                   | 45                   | 7                    | 7                                  | 17.18                |
| 10 plants . . . . .               | 1912  | 39                   | 72.4                              |                                                            | 31                   | 59 | 10                   |                                 | .224                                                | 5                    | 49                   | 36                   | 5                    |                                    | 16.19                |
|                                   | 1913  | 40                   | 73.1                              |                                                            | 30                   | 45 | 20                   | 5                               | .255                                                |                      | 25                   | 50                   | 15                   | 10                                 | 18.59                |
|                                   | 1914  | 33                   | 72.5                              |                                                            | 36                   | 45 | 12                   | 6                               | .226                                                | 6                    | 6                    | 79                   | 9                    |                                    | 16.38                |
| 12 plants . . . . .               | 1914  | 39                   | 72.4                              |                                                            | 31                   | 54 | 10                   | 5                               | .225                                                | 5                    | 13                   | 74                   | 8                    |                                    | 16.29                |
|                                   | 1915  | 38                   | 72.6                              |                                                            | 16                   | 68 | 11                   | 5                               | .239                                                | 5                    | 26                   | 53                   | 11                   | 5                                  | 17.30                |
| Cinder pitmen:                    |       |                      |                                   |                                                            |                      |    |                      |                                 |                                                     |                      |                      |                      |                      |                                    |                      |
| 8 plants . . . . .                | 1907  | 118                  | 67.9                              | 20                                                         | 37                   | 32 | 3                    | 7                               | .206                                                | 31                   | 46                   | 14                   | 5                    | 5                                  | 13.32                |
|                                   | 1908  | 71                   | 65.9                              | 30                                                         | 17                   | 39 | 14                   |                                 | .173                                                | 58                   | 34                   | 9                    |                      |                                    | 11.27                |
|                                   | 1909  | 92                   | 68.4                              | 23                                                         | 25                   | 33 | 11                   | 9                               | .178                                                | 37                   | 51                   | 5                    | 7                    |                                    | 11.88                |
|                                   | 1910  | 79                   | 67.3                              | 8                                                          | 19                   | 51 | 13                   | 10                              | .213                                                | 10                   | 58                   | 24                   | 8                    |                                    | 13.77                |
| 9 plants . . . . .                | 1910  | 85                   | 67.6                              | 7                                                          | 18                   | 54 | 12                   | 9                               | .211                                                | 9                    | 61                   | 22                   | 7                    |                                    | 13.69                |
|                                   | 1911  | 62                   | 69.8                              | 10                                                         | 26                   | 55 | 10                   |                                 | .199                                                | 3                    | 87                   |                      | 10                   |                                    | 13.55                |
|                                   | 1912  | 87                   | 67.2                              | 24                                                         | 41                   | 35 |                      |                                 | .204                                                |                      | 76                   | 17                   | 7                    |                                    | 13.27                |
| 9 plants . . . . .                | 1912  | 99                   | 68.1                              | 21                                                         |                      | 47 | 30                   | 2                               | .200                                                |                      | 77                   | 17                   | 6                    |                                    | 13.23                |
|                                   | 1913  | 113                  | 67.3                              | 24                                                         |                      | 43 | 32                   | 2                               | .238                                                |                      | 11                   | 76                   | 8                    | 5                                  | 15.56                |
| 8 plants . . . . .                | 1913  | 99                   | 67.8                              | 21                                                         |                      | 44 | 34                   |                                 | .227                                                |                      | 10                   | 83                   | 7                    |                                    | 15.02                |
|                                   | 1914  | 46                   | 72.0                              |                                                            | 26                   | 65 | 9                    |                                 | .213                                                |                      | 9                    | 91                   |                      |                                    | 15.30                |
| 9 plants . . . . .                | 1914  | 52                   | 71.9                              |                                                            | 35                   | 58 | 8                    |                                 | .213                                                |                      | 8                    | 92                   |                      |                                    | 15.30                |
|                                   | 1915  | 48                   | 72.0                              |                                                            | 13                   | 79 | 8                    |                                 | .214                                                |                      | 29                   | 71                   |                      |                                    | 15.42                |
| Ladle liners' helpers:            |       |                      |                                   |                                                            |                      |    |                      |                                 |                                                     |                      |                      |                      |                      |                                    |                      |
| 9 plants . . . . .                | 1907  | 39                   | 68.2                              | 15                                                         | 28                   | 51 | 5                    |                                 | .255                                                | 10                   | 31                   | 39                   | 8                    | 13                                 | 10.65                |
|                                   | 1908  | 31                   | 67.5                              | 19                                                         | 36                   | 39 |                      | 7                               | .209                                                | 23                   | 32                   | 36                   | 7                    | 3                                  | 13.79                |
|                                   | 1909  | 39                   | 68.5                              | 15                                                         | 28                   | 46 | 10                   |                                 | .230                                                | 10                   | 38                   | 38                   |                      | 13                                 | 15.26                |
|                                   | 1910  | 37                   | 68.5                              | 16                                                         | 3                    | 65 | 11                   | 5                               | .239                                                |                      | 38                   | 49                   |                      | 14                                 | 15.85                |

<sup>1</sup> Including 7 per cent whose full-time hours per week were 85.

TABLE 16.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1907 TO 1915—*BESSEMER CONVERTERS*—Continued.

| Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |    |                      |       | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                      | Average full-time weekly earnings. |
|-----------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|----------------------|----|----------------------|-------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|----------------------|------------------------------------|
|                                   |       |                      |                                   | 48 and under.                                              | Over 48 and under 72 | 72 | Over 72 and under 84 | 84    |                                 | Under 16 cts.                                       | 16 and under 20 cts. | 20 and under 30 cts. | 30 and under 40 cts. | 40 cts. and over.    |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
| Ladle liners' helpers—Concluded.  |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
| 10 plants.....                    | 1910  | 39                   | 68.7                              | 15                                                         | 3                    | 67 | 10                   | 5     | \$0.236                         | .....                                               | 41                   | 46                   | .....                | 13                   | \$15.73                            |
|                                   | 1911  | 34                   | 69.1                              | 9                                                          | 44                   | 47 | .....                | ..... | .233                            | 6                                                   | 41                   | 38                   | 3                    | 12                   | 15.75                              |
|                                   | 1912  | 34                   | 69.6                              | 9                                                          | 44                   | 41 | 6                    | ..... | .228                            | 6                                                   | 41                   | 38                   | 6                    | 9                    | 15.43                              |
|                                   | 1913  | 34                   | 69.8                              | 9                                                          | 44                   | 29 | 18                   | ..... | .255                            | .....                                               | 24                   | 56                   | 6                    | 15                   | 17.36                              |
| 9 plants.....                     | 1913  | 38                   | 70.9                              | 8                                                          | 40                   | 21 | 32                   | ..... | .247                            | .....                                               | 37                   | 45                   | 5                    | 13                   | 17.09                              |
|                                   | 1914  | 30                   | 68.8                              | .....                                                      | 60                   | 33 | 7                    | ..... | .225                            | .....                                               | 17                   | 83                   | .....                | .....                | 15.32                              |
| 11 pants.....                     | 1914  | 34                   | 69.1                              | .....                                                      | 53                   | 41 | 6                    | ..... | .222                            | .....                                               | 21                   | 79                   | .....                | .....                | 15.24                              |
|                                   | 1915  | 34                   | 69.5                              | .....                                                      | 36                   | 59 | 6                    | ..... | .233                            | 3                                                   | 32                   | 53                   | 12                   | .....                | 15.91                              |
| Stockers:                         |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
| 9 plants.....                     | 1907  | 371                  | 62.5                              | 46                                                         | 12                   | 7  | 22                   | 12    | .246                            | 17                                                  | 28                   | 27                   | 22                   | 7                    | 14.27                              |
|                                   | 1908  | 260                  | 58.3                              | 58                                                         | 11                   | 10 | 10                   | 12    | .275                            | 14                                                  | 21                   | 26                   | 23                   | 15                   | 14.93                              |
|                                   | 1909  | 266                  | 63.6                              | 43                                                         | 8                    | 12 | 23                   | 15    | .264                            | 27                                                  | 20                   | 12                   | 20                   | 22                   | 15.31                              |
|                                   | 1910  | 350                  | 64.9                              | 33                                                         | 16                   | 19 | 6                    | 26    | .266                            | 3                                                   | 38                   | 25                   | 20                   | 15                   | 16.04                              |
| 10 plants.....                    | 1910  | 352                  | 64.9                              | 32                                                         | 17                   | 19 | 6                    | 26    | .266                            | 3                                                   | 37                   | 26                   | 20                   | 15                   | 16.03                              |
|                                   | 1911  | 241                  | 61.7                              | 46                                                         | 7                    | 24 | 11                   | 12    | .233                            | 5                                                   | 40                   | 40                   | 10                   | 5                    | 13.60                              |
|                                   | 1912  | 268                  | 62.0                              | 46                                                         | 15                   | 8  | 18                   | 13    | .312                            | .....                                               | 38                   | 14                   | 21                   | 28                   | 17.66                              |
| 10 plants.....                    | 1912  | 280                  | 62.1                              | 45                                                         | 16                   | 8  | 15                   | 16    | .306                            | .....                                               | 41                   | 12                   | 20                   | 27                   | 17.38                              |
|                                   | 1913  | 337                  | 62.5                              | 23                                                         | 31                   | 27 | 13                   | 6     | .331                            | .....                                               | 26                   | 27                   | 11                   | 36                   | 19.05                              |
| 5 plants.....                     | 1913  | 194                  | 58.1                              | 23                                                         | 53                   | 11 | 10                   | 3     | .405                            | .....                                               | 5                    | 29                   | 9                    | 57                   | 22.07                              |
|                                   | 1914  | 162                  | 57.1                              | 56                                                         | 25                   | 12 | 7                    | ..... | .349                            | .....                                               | 11                   | 40                   | 4                    | 46                   | 18.91                              |
| 6 plants.....                     | 1914  | 167                  | 55.5                              | 63                                                         | 8                    | 22 | 7                    | ..... | .351                            | .....                                               | 6                    | 46                   | 4                    | 44                   | 18.59                              |
|                                   | 1915  | 157                  | 55.6                              | 61                                                         | 10                   | 20 | 8                    | ..... | .313                            | .....                                               | 4                    | 46                   | 29                   | 21                   | 16.70                              |
| Unclassified—productive:          |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
| 12 plants.....                    | 1914  | 652                  | 69.7                              | 6                                                          | 24                   | 43 | 21                   | 6     | .237                            | 2                                                   | 13                   | 73                   | 11                   | 1                    | 16.23                              |
|                                   | 1915  | 666                  | 69.8                              | 7                                                          | 17                   | 54 | 17                   | 5     | .247                            | .....                                               | 15                   | 68                   | 14                   | 4                    | 16.93                              |
| Unclassified—non-productive:      |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
| 12 plants.....                    | 1914  | 356                  | 72.3                              | .....                                                      | 29                   | 37 | 6                    | 29    | .233                            | .....                                               | 17                   | 71                   | 11                   | 1                    | 16.81                              |
|                                   | 1915  | 365                  | 73.2                              | .....                                                      | 26                   | 38 | 6                    | 30    | .230                            | .....                                               | 17                   | 73                   | 10                   | (1)                  | 16.79                              |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 | Under 20 cts.                                       | 20 and under 30 cts. | 30 and under 40 cts. | 40 and under 50 cts. | 50 and under 60 cts. |                                    |
| Cupola tappers:                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
| 8 plants.....                     | 1907  | 50                   | 60.5                              | 54                                                         | 8                    | 18 | 12                   | 8     | .379                            | 2                                                   | 12                   | 34                   | 52                   | .....                | 22.16                              |
|                                   | 1908  | 43                   | 59.3                              | 56                                                         | 5                    | 30 | 5                    | 5     | .335                            | 2                                                   | 23                   | 63                   | 12                   | .....                | 19.67                              |
|                                   | 1909  | 43                   | 61.5                              | 56                                                         | .....                | 12 | 19                   | 14    | .340                            | 2                                                   | 47                   | 7                    | 44                   | .....                | 19.74                              |
|                                   | 1910  | 56                   | 58.9                              | 64                                                         | .....                | 13 | 14                   | 9     | .362                            | 2                                                   | 34                   | 32                   | 27                   | 5                    | 20.30                              |
|                                   | 1911  | 41                   | 59.3                              | 59                                                         | .....                | 27 | 5                    | 10    | .318                            | 2                                                   | 34                   | 63                   | .....                | .....                | 18.19                              |
| 9 plants.....                     | 1911  | 45                   | 60.4                              | 53                                                         | .....                | 33 | 4                    | 9     | .314                            | 2                                                   | 40                   | 58                   | .....                | .....                | 18.36                              |
|                                   | 1912  | 48                   | 60.6                              | 56                                                         | 4                    | 10 | 21                   | 8     | .369                            | 2                                                   | 42                   | 2                    | 54                   | .....                | 20.94                              |
|                                   | 1913  | 69                   | 59.5                              | 30                                                         | 32                   | 23 | 15                   | ..... | .393                            | .....                                               | 32                   | 12                   | 39                   | 17                   | 22.25                              |
| 2 plants.....                     | 1913  | 22                   | 54.3                              | .....                                                      | 82                   | 18 | .....                | ..... | .461                            | .....                                               | .....                | 18                   | 82                   | .....                | 24.66                              |
|                                   | 1914  | 22                   | 54.3                              | .....                                                      | 82                   | 18 | .....                | ..... | .276                            | .....                                               | 82                   | 18                   | .....                | .....                | 15.18                              |
| 4 plants.....                     | 1914  | 34                   | 56.9                              | .....                                                      | 71                   | 29 | .....                | ..... | .286                            | .....                                               | 53                   | 47                   | .....                | .....                | 16.47                              |
|                                   | 1915  | 24                   | 55.8                              | .....                                                      | 75                   | 25 | .....                | ..... | .332                            | .....                                               | 4                    | 96                   | .....                | .....                | 18.43                              |
| Ingot strippers:                  |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
| 9 plants.....                     | 1907  | 29                   | 67.4                              | 31                                                         | 14                   | 21 | 21                   | 14    | .310                            | .....                                               | 62                   | 17                   | 14                   | 7                    | 19.60                              |
|                                   | 1908  | 28                   | 68.4                              | 21                                                         | 21                   | 21 | 36                   | ..... | .238                            | 14                                                  | 79                   | 7                    | .....                | .....                | 16.34                              |
|                                   | 1909  | 28                   | 70.2                              | 21                                                         | 14                   | 21 | 21                   | 21    | .264                            | .....                                               | 79                   | 21                   | .....                | .....                | 18.17                              |
|                                   | 1910  | 29                   | 67.9                              | 10                                                         | 21                   | 28 | 21                   | 21    | .307                            | .....                                               | 69                   | .....                | 31                   | .....                | 19.85                              |

<sup>1</sup> Less than one-half of 1 per cent.

TABLE 16.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1907 TO 1915—BESSEMER CONVERTERS—Continued.

| Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |    |                      |       | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                      | Average full-time weekly earnings. |
|-----------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|----------------------|----|----------------------|-------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|----------------------|------------------------------------|
|                                   |       |                      |                                   | 48 and under.                                              | Over 48 and under 72 | 72 | Over 72 and under 84 | 84    |                                 | Under 20 cts.                                       | 20 and under 30 cts. | 30 and under 40 cts. | 40 and under 50 cts. | 50 and under 60 cts. |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
| Ingot strippers—<br>Concluded.    |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
| 10 plants.....                    | 1910  | 31                   | 68.1                              | 10                                                         | 19                   | 32 | 19                   | 19    | \$0.303                         | .....                                               | 71                   | .....                | 29                   | .....                | \$19.69                            |
|                                   | 1911  | 27                   | 70.4                              | .....                                                      | 33                   | 44 | 22                   | ..... | .282                            | 15                                                  | 67                   | .....                | 19                   | .....                | 19.26                              |
|                                   | 1912  | 28                   | 68.8                              | 11                                                         | 25                   | 29 | 36                   | ..... | .320                            | .....                                               | 72                   | 7                    | .....                | 21                   | 20.90                              |
|                                   | 1913  | 28                   | 69.9                              | .....                                                      | 29                   | 21 | 50                   | ..... | .334                            | .....                                               | 57                   | 14                   | 29                   | .....                | 22.81                              |
|                                   | 1914  | 23                   | 70.7                              | .....                                                      | 22                   | 35 | 35                   | 9     | .304                            | .....                                               | 78                   | 4                    | 17                   | .....                | 21.03                              |
| 12 plants.....                    | 1914  | 29                   | 66.0                              | 21                                                         | 17                   | 28 | 28                   | 7     | .313                            | .....                                               | 62                   | 24                   | 14                   | .....                | 20.11                              |
|                                   | 1915  | 31                   | 66.2                              | 19                                                         | 10                   | 39 | 32                   | ..... | .332                            | .....                                               | 45                   | 32                   | 23                   | .....                | 21.39                              |
| Mold cappers:<br>8 plants.....    | 1907  | 48                   | 54.5                              | 75                                                         | .....                | 17 | 8                    | ..... | .347                            | 8                                                   | 17                   | 56                   | 6                    | 13                   | 18.02                              |
|                                   | 1908  | 39                   | 53.7                              | 77                                                         | .....                | 18 | 5                    | ..... | .196                            | 74                                                  | 21                   | 5                    | .....                | .....                | 10.57                              |
|                                   | 1909  | 43                   | 54.0                              | 77                                                         | .....                | 14 | 9                    | ..... | .271                            | 14                                                  | 61                   | 12                   | .....                | 14                   | 14.26                              |
|                                   | 1910  | 46                   | 55.0                              | 26                                                         | 52                   | 9  | 4                    | 9     | .326                            | 17                                                  | 11                   | 59                   | .....                | 13                   | 17.07                              |
| 9 plants.....                     | 1910  | 52                   | 57.0                              | 23                                                         | 46                   | 19 | 4                    | 8     | .314                            | 15                                                  | 21                   | 52                   | .....                | 12                   | 16.96                              |
|                                   | 1911  | 37                   | 64.2                              | 32                                                         | .....                | 62 | 5                    | ..... | .282                            | 24                                                  | 43                   | 16                   | 16                   | .....                | 17.36                              |
|                                   | 1912  | 44                   | 59.5                              | 55                                                         | .....                | 32 | 14                   | ..... | .324                            | 18                                                  | 27                   | 36                   | 5                    | 14                   | 18.03                              |
| 10 plants.....                    | 1912  | 52                   | 61.5                              | 46                                                         | 12                   | 27 | 15                   | ..... | .301                            | 27                                                  | 27                   | 31                   | 4                    | 12                   | 17.23                              |
|                                   | 1913  | 61                   | 59.5                              | 54                                                         | 10                   | 23 | 13                   | ..... | .360                            | 7                                                   | 30                   | 21                   | 28                   | 15                   | 20.28                              |
| 8 plants.....                     | 1913  | 51                   | 56.9                              | 65                                                         | .....                | 27 | 8                    | ..... | .382                            | 8                                                   | 16                   | 25                   | 33                   | 18                   | 20.71                              |
|                                   | 1914  | 31                   | 57.9                              | 48                                                         | 10                   | 42 | .....                | ..... | .267                            | 13                                                  | 48                   | 39                   | .....                | .....                | 15.37                              |
| 10 plants.....                    | 1914  | 39                   | 60.8                              | 38                                                         | 8                    | 54 | .....                | ..... | .260                            | 10                                                  | 59                   | 31                   | .....                | .....                | 15.67                              |
|                                   | 1915  | 40                   | 60.9                              | 38                                                         | 18                   | 45 | .....                | ..... | .294                            | 10                                                  | 45                   | 40                   | 5                    | .....                | 17.53                              |
| Stopper makers:<br>9 plants.....  | 1907  | 10                   | 72.8                              | .....                                                      | 20                   | 40 | 30                   | 10    | .316                            | 10                                                  | 60                   | .....                | 30                   | .....                | 23.01                              |
|                                   | 1908  | 9                    | 72.9                              | .....                                                      | 22                   | 44 | 11                   | 22    | .223                            | 33                                                  | 56                   | 11                   | .....                | .....                | 16.10                              |
|                                   | 1909  | 9                    | 71.6                              | .....                                                      | 44                   | 22 | 11                   | 22    | .270                            | 22                                                  | 44                   | 22                   | 11                   | .....                | 19.22                              |
|                                   | 1910  | 11                   | 73.1                              | .....                                                      | 9                    | 73 | .....                | 18    | .263                            | 9                                                   | 64                   | 27                   | .....                | .....                | 19.33                              |
| 10 plants.....                    | 1910  | 12                   | 73.0                              | .....                                                      | 8                    | 75 | .....                | 17    | .260                            | 8                                                   | 67                   | 25                   | .....                | .....                | 19.14                              |
|                                   | 1911  | 10                   | 72.0                              | .....                                                      | 20                   | 60 | .....                | 20    | .273                            | 20                                                  | 40                   | 40                   | .....                | .....                | 19.53                              |
|                                   | 1912  | 10                   | 70.8                              | .....                                                      | 30                   | 50 | .....                | 20    | .272                            | 20                                                  | 50                   | 20                   | 10                   | .....                | 18.91                              |
|                                   | 1913  | 10                   | 70.6                              | .....                                                      | 20                   | 80 | .....                | ..... | .302                            | .....                                               | 60                   | 30                   | 10                   | .....                | 21.25                              |
|                                   | 1914  | 10                   | 70.0                              | .....                                                      | 40                   | 60 | .....                | ..... | .253                            | 10                                                  | 70                   | 20                   | .....                | .....                | 17.67                              |
| 12 plants.....                    | 1914  | 12                   | 70.2                              | .....                                                      | 42                   | 58 | .....                | ..... | .251                            | 8                                                   | 75                   | 17                   | .....                | .....                | 17.60                              |
|                                   | 1915  | 12                   | 69.7                              | .....                                                      | 25                   | 75 | .....                | ..... | .263                            | 8                                                   | 67                   | 25                   | .....                | .....                | 18.13                              |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                      |                                    |
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# 114 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

TABLE 16.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1907 TO 1915—*BESSEMER CONVERTERS*—Continued.

| Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |       |                      |                   | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                   | Average full-time weekly earnings. |
|-----------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|----------------------|-------|----------------------|-------------------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|-------------------|------------------------------------|
|                                   |       |                      |                                   | 48 and under.                                              | Over 48 and under 72 | 72    | Over 72 and under 84 | 84                |                                 | Under 25 cts.                                       | 25 and under 40 cts. | 40 and under 50 cts. | 50 and under 60 cts. | 60 cts. and over. |                                    |
| Cupola melters:                   |       |                      |                                   |                                                            |                      |       |                      |                   |                                 |                                                     |                      |                      |                      |                   |                                    |
| 7 plants.....                     | 1907  | 15                   | 65.2                              | 40                                                         | 13                   | 20    | 13                   | 1 <sup>1</sup> 13 | \$0.509                         | 7                                                   | 27                   | .....                | 33                   | 33                | \$31.67                            |
|                                   | 1908  | 15                   | 64.7                              | 40                                                         | 13                   | 20    | 13                   | 13                | .350                            | 13                                                  | 53                   | 20                   | 13                   | .....             | 22.20                              |
|                                   | 1909  | 15                   | 64.7                              | 40                                                         | 13                   | 20    | 13                   | 13                | .419                            | 20                                                  | 13                   | 33                   | 33                   | .....             | 26.09                              |
|                                   | 1910  | 16                   | 60.6                              | 38                                                         | 19                   | 19    | 13                   | 13                | .447                            | 6                                                   | 44                   | .....                | 31                   | 19                | 25.85                              |
|                                   | 1911  | 15                   | 64.3                              | 40                                                         | 13                   | 20    | 13                   | 13                | .390                            | 7                                                   | 40                   | 40                   | 13                   | .....             | 24.45                              |
| 8 plants.....                     | 1911  | 17                   | 65.2                              | 35                                                         | 12                   | 29    | 12                   | 12                | .386                            | 6                                                   | 47                   | 35                   | 12                   | .....             | 24.62                              |
|                                   | 1912  | 18                   | 61.6                              | 50                                                         | 11                   | 17    | 11                   | 11                | .409                            | 6                                                   | 44                   | 22                   | 28                   | .....             | 23.82                              |
|                                   | 1913  | 19                   | 62.4                              | 32                                                         | 26                   | 21    | 11                   | 11                | .477                            | .....                                               | 32                   | 11                   | 42                   | 16                | 28.23                              |
| 5 plants.....                     | 1913  | 14                   | 62.7                              | 21                                                         | 64                   | ..... | 14                   | .....             | .507                            | .....                                               | 29                   | 14                   | 36                   | 21                | 30.89                              |
|                                   | 1914  | 14                   | 63.0                              | 21                                                         | 35                   | 29    | 14                   | .....             | .346                            | .....                                               | 79                   | 21                   | .....                | .....             | 21.40                              |
| 6 plants.....                     | 1914  | 15                   | 59.5                              | 20                                                         | 53                   | 13    | 13                   | .....             | .390                            | .....                                               | 60                   | 40                   | .....                | .....             | 23.00                              |
|                                   | 1915  | 15                   | 59.3                              | 20                                                         | 40                   | 27    | 13                   | .....             | .449                            | .....                                               | 47                   | 13                   | 40                   | .....             | 25.90                              |
| Ladle liners:                     |       |                      |                                   |                                                            |                      |       |                      |                   |                                 |                                                     |                      |                      |                      |                   |                                    |
| 9 plants.....                     | 1907  | 21                   | 65.1                              | 29                                                         | 14                   | 48    | 10                   | .....             | .454                            | 10                                                  | 38                   | 19                   | 10                   | 24                | 28.95                              |
|                                   | 1908  | 21                   | 65.6                              | 29                                                         | 24                   | 38    | .....                | 10                | .306                            | 33                                                  | 43                   | 14                   | 10                   | .....             | 19.78                              |
|                                   | 1909  | 21                   | 65.1                              | 29                                                         | 14                   | 48    | 10                   | .....             | .392                            | 24                                                  | 24                   | 38                   | .....                | 14                | 25.22                              |
|                                   | 1910  | 23                   | 66.3                              | 26                                                         | 4                    | 52    | 9                    | 9                 | .383                            | 17                                                  | 39                   | 22                   | 22                   | .....             | 25.20                              |
| 10 plants.....                    | 1910  | 25                   | 66.8                              | 24                                                         | 4                    | 56    | 8                    | 8                 | .378                            | 16                                                  | 44                   | 20                   | 20                   | .....             | 25.05                              |
|                                   | 1911  | 24                   | 68.3                              | 13                                                         | 21                   | 67    | .....                | .....             | .342                            | 25                                                  | 33                   | 25                   | 17                   | .....             | 22.85                              |
|                                   | 1912  | 24                   | 68.9                              | 13                                                         | 21                   | 58    | 8                    | .....             | .369                            | 17                                                  | 50                   | 21                   | 13                   | .....             | 24.95                              |
| 10 plants.....                    | 1912  | 22                   | 68.6                              | 14                                                         | 23                   | 55    | 9                    | .....             | .384                            | 9                                                   | 55                   | 23                   | 14                   | .....             | 25.84                              |
|                                   | 1913  | 22                   | 68.7                              | 14                                                         | 23                   | 45    | 18                   | .....             | .418                            | 9                                                   | 27                   | 32                   | 32                   | .....             | 23.22                              |
|                                   | 1914  | 21                   | 68.0                              | .....                                                      | 38                   | 52    | 10                   | .....             | .304                            | 19                                                  | 67                   | 14                   | .....                | .....             | 20.55                              |
| 12 plants.....                    | 1914  | 25                   | 68.6                              | .....                                                      | 32                   | 60    | 8                    | .....             | .304                            | 16                                                  | 72                   | 12                   | .....                | .....             | 20.77                              |
|                                   | 1915  | 26                   | 68.8                              | .....                                                      | 31                   | 62    | 8                    | .....             | .344                            | 8                                                   | 73                   | 12                   | 8                    | .....             | 23.47                              |
| Regulators, first:                |       |                      |                                   |                                                            |                      |       |                      |                   |                                 |                                                     |                      |                      |                      |                   |                                    |
| 9 plants.....                     | 1907  | 26                   | 62.3                              | 46                                                         | 8                    | 31    | 8                    | 8                 | .437                            | 8                                                   | 42                   | 35                   | .....                | 15                | 27.28                              |
|                                   | 1908  | 25                   | 64.7                              | 36                                                         | 16                   | 32    | 8                    | 8                 | .266                            | 56                                                  | 28                   | 16                   | .....                | .....             | 17.78                              |
|                                   | 1909  | 25                   | 64.8                              | 36                                                         | 8                    | 40    | 8                    | 8                 | .344                            | 32                                                  | 36                   | 8                    | 24                   | .....             | 22.97                              |
|                                   | 1910  | 29                   | 61.4                              | 21                                                         | 31                   | 35    | .....                | 14                | .414                            | 7                                                   | 38                   | 35                   | 14                   | 7                 | 25.60                              |
| 10 plants.....                    | 1910  | 31                   | 62.1                              | 19                                                         | 29                   | 39    | .....                | 13                | .408                            | 7                                                   | 42                   | 32                   | 13                   | 7                 | 25.45                              |
|                                   | 1911  | 24                   | 66.8                              | 25                                                         | 17                   | 50    | .....                | 8                 | .377                            | 17                                                  | 38                   | 38                   | 8                    | .....             | 24.79                              |
|                                   | 1912  | 25                   | 64.7                              | 36                                                         | 16                   | 32    | 8                    | 8                 | .411                            | 8                                                   | 36                   | 40                   | 16                   | .....             | 26.24                              |
| 10 plants.....                    | 1912  | 24                   | 68.5                              | 25                                                         | 8                    | 25    | 33                   | 8                 | .399                            | 8                                                   | 46                   | 38                   | 8                    | .....             | 27.16                              |
|                                   | 1913  | 24                   | 67.6                              | 25                                                         | 8                    | 33    | 33                   | .....             | .451                            | .....                                               | 25                   | 38                   | 29                   | 8                 | 30.28                              |
| 9 plants.....                     | 1913  | 20                   | 66.4                              | 30                                                         | 10                   | 20    | 40                   | .....             | .484                            | .....                                               | 10                   | 45                   | 35                   | 10                | 32.23                              |
|                                   | 1914  | 18                   | 69.0                              | 17                                                         | 22                   | 28    | 33                   | .....             | .324                            | 28                                                  | 56                   | 17                   | .....                | .....             | 22.20                              |
| 11 plants.....                    | 1914  | 24                   | 63.8                              | 38                                                         | 17                   | 21    | 25                   | .....             | .328                            | 21                                                  | 67                   | 13                   | .....                | .....             | 20.71                              |
|                                   | 1915  | 26                   | 64.7                              | 35                                                         | .....                | 35    | 31                   | .....             | .351                            | 12                                                  | 54                   | 27                   | 8                    | .....             | 22.91                              |
| Regulators, second:               |       |                      |                                   |                                                            |                      |       |                      |                   |                                 |                                                     |                      |                      |                      |                   |                                    |
| 6 plants.....                     | 1907  | 18                   | 65.3                              | 33                                                         | 11                   | 33    | 22                   | .....             | .427                            | .....                                               | 11                   | 78                   | 11                   | .....             | 27.81                              |
|                                   | 1908  | 14                   | 73.5                              | .....                                                      | 29                   | 43    | 29                   | .....             | .269                            | 57                                                  | 36                   | 7                    | .....                | .....             | 19.64                              |
|                                   | 1909  | 14                   | 73.8                              | .....                                                      | 14                   | 57    | 29                   | .....             | .365                            | 7                                                   | 50                   | 43                   | .....                | .....             | 26.80                              |
|                                   | 1910  | 18                   | 66.7                              | 33                                                         | .....                | 44    | .....                | 22                | .403                            | .....                                               | 39                   | 50                   | 11                   | .....             | 26.96                              |
| 8 plants.....                     | 1910  | 22                   | 67.5                              | 27                                                         | 9                    | 46    | .....                | 18                | .378                            | 9                                                   | 41                   | 41                   | 9                    | .....             | 25.52                              |
|                                   | 1911  | 21                   | 65.0                              | 29                                                         | 19                   | 52    | .....                | .....             | .333                            | 19                                                  | 48                   | 33                   | .....                | .....             | 21.41                              |
|                                   | 1912  | 23                   | 63.5                              | 39                                                         | 17                   | 26    | 17                   | .....             | .367                            | .....                                               | 83                   | .....                | 17                   | .....             | 23.36                              |
| 9 plants.....                     | 1912  | 24                   | 67.0                              | 25                                                         | 17                   | 33    | 25                   | .....             | .381                            | .....                                               | 67                   | 25                   | 8                    | .....             | 25.63                              |
|                                   | 1913  | 24                   | 67.0                              | 25                                                         | 17                   | 33    | 25                   | .....             | .411                            | 17                                                  | 25                   | 38                   | 13                   | 8                 | 27.56                              |
| 10 plants.....                    | 1913  | 28                   | 68.3                              | 21                                                         | 14                   | 29    | 36                   | .....             | .394                            | 14                                                  | 36                   | 32                   | 11                   | 7                 | 26.81                              |
|                                   | 1914  | 22                   | 69.0                              | 14                                                         | 18                   | 32    | 36                   | .....             | .281                            | 41                                                  | 45                   | 14                   | .....                | .....             | 19.22                              |
| 11 plants.....                    | 1914  | 25                   | 66.5                              | 24                                                         | 16                   | 28    | 32                   | .....             | .289                            | 36                                                  | 52                   | 12                   | .....                | .....             | 18.90                              |
|                                   | 1915  | 26                   | 66.6                              | 23                                                         | 8                    | 46    | 23                   | .....             | .324                            | 27                                                  | 42                   | 31                   | .....                | .....             | 21.64                              |

<sup>1</sup> Including 7 per cent whose full-time hours per week were 91.

TABLE 16.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1907 TO 1915—BESSEMER CONVERTERS—Continued.

| Occupation, and number of plants.      | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |    |                      | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                      | Average full-time weekly earnings. |       |
|----------------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|----------------------|----|----------------------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|----------------------|------------------------------------|-------|
|                                        |       |                      |                                   | 48 and under.                                              | Over 48 and under 72 | 72 | Over 72 and under 84 |                                 | Under 25 cts.                                       | 25 and under 40 cts. | 40 and under 50 cts. | 50 and under 60 cts. | 60 cts. and over.    |                                    |       |
|                                        |       |                      |                                   |                                                            |                      |    |                      |                                 |                                                     |                      |                      |                      |                      |                                    |       |
| Vessel men's helpers:<br>9 plants..... | 1907  | 47                   | 57.0                              | 51                                                         | 19                   | 9  | 17                   | 4                               | .566                                                | 15                   | 26                   | 13                   | 47                   | \$31.84                            |       |
|                                        | 1908  | 45                   | 59.5                              | 40                                                         | 20                   | 18 | 18                   | 4                               | .376                                                | 27                   | 29                   | 13                   | 4                    | 21.65                              |       |
|                                        | 1909  | 45                   | 59.6                              | 40                                                         | 20                   | 18 | 18                   | 4                               | .484                                                | 22                   | 38                   | 18                   | 18                   | 28.24                              |       |
|                                        | 1910  | 49                   | 55.3                              | 49                                                         | 31                   | 8  | .....                | 12                              | .524                                                | 16                   | 51                   | 4                    | 29                   | 28.86                              |       |
| 10 plants.....                         | 1910  | 53                   | 56.5                              | 45                                                         | 28                   | 15 | .....                | 11                              | .506                                                | 4                    | 19                   | 47                   | 4                    | 28.22                              |       |
|                                        | 1911  | 51                   | 57.6                              | 47                                                         | 18                   | 24 | 8                    | 4                               | .421                                                | 12                   | 27                   | 28                   | 28                   | 23.48                              |       |
|                                        | 1912  | 53                   | 55.9                              | 57                                                         | 17                   | 8  | 15                   | 4                               | .470                                                | 38                   | 21                   | 25                   | 17                   | 25.47                              |       |
| 10 plants.....                         | 1912  | 53                   | 56.5                              | 45                                                         | 28                   | 8  | 15                   | 4                               | .467                                                | 38                   | 26                   | 19                   | 17                   | 25.70                              |       |
|                                        | 1913  | 53                   | 56.0                              | 45                                                         | 36                   | 11 | 8                    | .....                           | .528                                                | 17                   | 34                   | 17                   | 32                   | 28.87                              |       |
| 10 plants.....                         | 1913  | 53                   | 56.4                              | 34                                                         | 48                   | 11 | 8                    | .....                           | .528                                                | 17                   | 34                   | 17                   | 32                   | 29.15                              |       |
|                                        | 1914  | 51                   | 54.6                              | 35                                                         | 49                   | 16 | .....                | .....                           | .338                                                | 12                   | 65                   | 22                   | 2                    | 18.31                              |       |
| 12 plants.....                         | 1914  | 57                   | 54.3                              | 37                                                         | 49                   | 14 | .....                | .....                           | .342                                                | 11                   | 65                   | 23                   | 2                    | 18.42                              |       |
|                                        | 1915  | 56                   | 55.5                              | 32                                                         | 43                   | 25 | .....                | .....                           | .383                                                | 11                   | 52                   | 21                   | 13                   | 21.18                              |       |
|                                        |       |                      |                                   |                                                            |                      |    |                      |                                 |                                                     | Under 40 cts.        | 40 and under 50 cts. | 50 and under 60 cts. | 60 and under 70 cts. | 70 cts. and over.                  |       |
| Blowers:<br>9 plants.....              | 1907  | 20                   | 65.4                              | 30                                                         | 10                   | 50 | 10                   | .....                           | .619                                                | 20                   | 20                   | .....                | 15                   | 45                                 | 39.55 |
|                                        | 1908  | 19                   | 68.8                              | 16                                                         | 11                   | 63 | 11                   | .....                           | .466                                                | 37                   | 42                   | 11                   | .....                | 11                                 | 32.41 |
|                                        | 1909  | 19                   | 68.8                              | 16                                                         | 11                   | 63 | 11                   | .....                           | .486                                                | 21                   | 47                   | 21                   | .....                | 11                                 | 33.29 |
|                                        | 1910  | 20                   | 69.8                              | 15                                                         | .....                | 60 | 15                   | 10                              | .536                                                | 10                   | 45                   | 20                   | 15                   | 10                                 | 37.00 |
|                                        | 1911  | 18                   | 71.9                              | .....                                                      | 11                   | 89 | .....                | .....                           | .498                                                | 11                   | 56                   | 22                   | .....                | 11                                 | 35.84 |
| 10 plants.....                         | 1911  | 20                   | 72.0                              | .....                                                      | 10                   | 90 | .....                | .....                           | .493                                                | 10                   | 60                   | 20                   | .....                | 10                                 | 35.48 |
|                                        | 1912  | 21                   | 69.1                              | 14                                                         | 10                   | 67 | 10                   | .....                           | .529                                                | .....                | 57                   | 24                   | 10                   | 10                                 | 36.36 |
|                                        | 1913  | 23                   | 63.2                              | 26                                                         | 22                   | 44 | 9                    | .....                           | .600                                                | .....                | 35                   | 22                   | 22                   | 22                                 | 37.33 |
| 10 plants.....                         | 1913  | 23                   | 63.3                              | 26                                                         | 22                   | 35 | 17                   | .....                           | .598                                                | .....                | 35                   | 22                   | 22                   | 22                                 | 37.33 |
|                                        | 1914  | 22                   | 65.6                              | 14                                                         | 23                   | 55 | 9                    | .....                           | .543                                                | .....                | 50                   | 27                   | 14                   | 9                                  | 36.25 |
| 12 plants.....                         | 1914  | 27                   | 64.1                              | 22                                                         | 18                   | 52 | 7                    | .....                           | .545                                                | .....                | 48                   | 26                   | 19                   | 7                                  | 34.43 |
|                                        | 1915  | 27                   | 64.0                              | 22                                                         | 18                   | 52 | 7                    | .....                           | .561                                                | .....                | 41                   | 30                   | 22                   | 7                                  | 35.61 |
| Steel pourers:<br>9 plants.....        | 1907  | 29                   | 55.4                              | 72                                                         | .....                | 14 | 14                   | .....                           | .693                                                | 7                    | 17                   | 10                   | 14                   | 52                                 | 36.39 |
|                                        | 1908  | 28                   | 57.4                              | 64                                                         | .....                | 21 | 14                   | .....                           | .439                                                | 47                   | 4                    | 32                   | 18                   | .....                              | 24.25 |
|                                        | 1909  | 28                   | 57.5                              | 64                                                         | .....                | 21 | 14                   | .....                           | .576                                                | 39                   | .....                | 18                   | .....                | 43                                 | 31.61 |
|                                        | 1910  | 30                   | 54.5                              | 70                                                         | 10                   | 7  | .....                | 13                              | .630                                                | 7                    | 23                   | 20                   | 10                   | 40                                 | 32.94 |
| 10 plants.....                         | 1910  | 32                   | 55.6                              | 66                                                         | 9                    | 13 | .....                | 13                              | .617                                                | 6                    | 28                   | 19                   | 9                    | 38                                 | 32.74 |
|                                        | 1911  | 30                   | 55.1                              | 70                                                         | .....                | 30 | .....                | .....                           | .535                                                | 23                   | 10                   | 27                   | 30                   | 10                                 | 27.91 |
|                                        | 1912  | 32                   | 54.7                              | 75                                                         | .....                | 13 | 13                   | .....                           | .578                                                | 6                    | 34                   | 31                   | 3                    | 25                                 | 30.67 |
| 10 plants.....                         | 1912  | 34                   | 55.7                              | 71                                                         | .....                | 18 | 12                   | .....                           | .570                                                | 6                    | 38                   | 29                   | 3                    | 24                                 | 30.65 |
|                                        | 1913  | 34                   | 55.7                              | 71                                                         | .....                | 18 | 12                   | .....                           | .633                                                | 18                   | 3                    | 32                   | 9                    | 38                                 | 33.94 |
| 10 plants.....                         | 1913  | 34                   | 55.7                              | 71                                                         | .....                | 18 | 12                   | .....                           | .640                                                | 12                   | 9                    | 32                   | 9                    | 38                                 | 34.39 |
|                                        | 1914  | 31                   | 53.4                              | 48                                                         | 29                   | 23 | .....                | .....                           | .429                                                | 48                   | 6                    | 42                   | 3                    | .....                              | 23.12 |
| 12 plants.....                         | 1914  | 37                   | 52.5                              | 57                                                         | 24                   | 19 | .....                | .....                           | .444                                                | 41                   | 14                   | 38                   | 8                    | .....                              | 23.42 |
|                                        | 1915  | 35                   | 53.5                              | 60                                                         | 17                   | 23 | .....                | .....                           | .525                                                | 23                   | 14                   | 34                   | 20                   | 9                                  | 27.96 |
| Stopper setters:<br>9 plants.....      | 1907  | 45                   | 51.5                              | 87                                                         | .....                | 9  | 4                    | .....                           | .630                                                | 27                   | 16                   | 13                   | 13                   | 31                                 | 31.79 |
|                                        | 1908  | 40                   | 54.3                              | 75                                                         | .....                | 20 | 5                    | .....                           | .343                                                | 68                   | 18                   | .....                | 5                    | 10                                 | 18.50 |
|                                        | 1909  | 34                   | 55.4                              | 71                                                         | .....                | 24 | 6                    | .....                           | .552                                                | 35                   | 6                    | 15                   | 9                    | 35                                 | 29.36 |
|                                        | 1910  | 37                   | 51.5                              | 73                                                         | 16                   | 5  | .....                | 5                               | .589                                                | 30                   | 16                   | 8                    | 14                   | 32                                 | 30.08 |
| 10 plants.....                         | 1910  | 39                   | 52.6                              | 69                                                         | 15                   | 10 | .....                | 5                               | .577                                                | 33                   | 15                   | 8                    | 13                   | 31                                 | 29.81 |
|                                        | 1911  | 39                   | 55.3                              | 69                                                         | .....                | 31 | .....                | .....                           | .498                                                | 44                   | 18                   | 8                    | .....                | 31                                 | 26.08 |
|                                        | 1912  | 42                   | 51.7                              | 86                                                         | .....                | 10 | 5                    | .....                           | .496                                                | 33                   | 36                   | 7                    | 10                   | 14                                 | 25.36 |
|                                        | 1913  | 43                   | 51.6                              | 86                                                         | .....                | 9  | 5                    | .....                           | .558                                                | 19                   | 28                   | 5                    | 21                   | 28                                 | 28.37 |

TABLE 16.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1907 TO 1915—*BESSEMER CONVERTERS*—Concluded.

| Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |    |                      | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                   | Average full-time weekly earnings. |       |
|-----------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|----------------------|----|----------------------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|-------------------|------------------------------------|-------|
|                                   |       |                      |                                   | 48 and under.                                              | Over 48 and under 72 | 72 | Over 72 and under 84 |                                 | Under 40 cts.                                       | 40 and under 50 cts. | 50 and under 60 cts. | 60 and under 70 cts. | 70 cts. and over. |                                    |       |
|                                   |       |                      |                                   |                                                            |                      |    |                      |                                 |                                                     |                      |                      |                      |                   |                                    |       |
| Stopper setters—<br>Concluded.    |       |                      |                                   |                                                            |                      |    |                      |                                 |                                                     |                      |                      |                      |                   |                                    |       |
| 10 plants.....                    | 1913  | 43                   | 51.6                              | 86                                                         |                      | 9  | 5                    | \$0.553                         | 23                                                  | 23                   | 5                    | 21                   | 28                | \$28.01                            |       |
|                                   | 1914  | 38                   | 51.2                              | 63                                                         | 24                   | 13 |                      | .363                            | 66                                                  | 34                   |                      |                      |                   | 18.58                              |       |
| 12 plants.....                    | 1914  | 44                   | 50.7                              | 68                                                         | 20                   | 11 |                      | .376                            | 64                                                  | 30                   | 5                    | 2                    |                   | 19.03                              |       |
|                                   | 1915  | 42                   | 51.5                              | 71                                                         | 14                   | 14 |                      | .423                            | 45                                                  | 24                   | 21                   | 10                   |                   | 21.76                              |       |
| Vessel men:<br>9 plants.....      | 1907  | 23                   | 58.5                              | 52                                                         | 13                   | 9  | 17                   | 9                               | .793                                                | 9                    |                      | 9                    | 22                | 61                                 | 44.58 |
|                                   | 1908  | 22                   | 61.1                              | 41                                                         | 14                   | 18 | 18                   | 9                               | .528                                                | 41                   | 9                    |                      | 32                | 18                                 | 31.27 |
|                                   | 1909  | 22                   | 61.2                              | 41                                                         | 14                   | 18 | 18                   | 9                               | .630                                                | 18                   | 23                   | 9                    | 14                | 36                                 | 37.19 |
|                                   | 1910  | 24                   | 56.6                              | 50                                                         | 25                   | 8  |                      | 17                              | .708                                                | 8                    | 8                    |                      | 50                | 33                                 | 38.88 |
| 10 plants.....                    | 1910  | 26                   | 57.8                              | 46                                                         | 23                   | 15 |                      | 15                              | .685                                                | 8                    | 15                   |                      | 46                | 31                                 | 38.18 |
|                                   | 1911  | 25                   | 59.1                              | 48                                                         | 12                   | 24 | 8                    | 8                               | .580                                                | 24                   | 8                    | 16                   | 24                | 28                                 | 32.45 |
|                                   | 1912  | 26                   | 57.3                              | 58                                                         | 12                   | 8  | 15                   | 8                               | .703                                                | 8                    | 19                   | 15                   | 12                | 46                                 | 38.32 |
| 10 plants.....                    | 1912  | 26                   | 58.3                              | 35                                                         | 35                   | 8  | 15                   | 8                               | .688                                                | 8                    | 19                   | 15                   | 12                | 46                                 | 38.60 |
|                                   | 1913  | 26                   | 57.4                              | 35                                                         | 35                   | 15 | 15                   |                                 | .744                                                |                      | 15                   | 8                    | 31                | 46                                 | 41.09 |
| 10 plants.....                    | 1913  | 26                   | 57.8                              | 23                                                         | 46                   | 15 | 15                   |                                 | .744                                                |                      | 15                   | 8                    | 31                | 46                                 | 41.52 |
|                                   | 1914  | 25                   | 56.4                              | 24                                                         | 48                   | 20 | 8                    |                                 | .492                                                | 24                   | 16                   | 52                   | 8                 |                                    | 27.71 |
| 12 plants.....                    | 1914  | 31                   | 55.6                              | 29                                                         | 49                   | 16 | 6                    |                                 | .499                                                | 19                   | 23                   | 45                   | 13                |                                    | 27.64 |
|                                   | 1915  | 32                   | 56.0                              | 28                                                         | 47                   | 19 | 6                    |                                 | .554                                                | 19                   | 13                   | 44                   | 16                | 9                                  | 30.87 |

Referring to the first occupation presented in Table 16—laborers—direct comparison can be made of data for 9 identical plants from 1907 to 1910, for 10 plants from 1910 to 1912, for another group of 10 identical plants for 1912 and 1913, and yet another group of 10 identical plants for 1913 and 1914, and for 12 identical plants for 1914 and 1915. The first line of the table is analyzed as follows: In 1907 the 9 Bessemer plants from which reports were obtained employed 801 laborers, whose average full-time hours of work were 78 per week. For 3 per cent of the 801 laborers the full-time hours per week were over 48 and under 72; for 22 per cent, 72; for 33 per cent, over 72 and under 84; and for 42 per cent, 84 hours. The average rate of wages or earnings per hour of laborers in the year considered (1907) was 15.5 cents. Of the total number 71 per cent received 14 and under 16 cents per hour, and 29 per cent, 16 and under 18 cents per hour. The average full-time weekly earnings were \$12.12. The other lines of the table may be read in the same manner. Referring to the last column of the table, it is seen that in 9 identical plants the average full-time weekly earnings of laborers were \$12.12 in 1907. In the next two years there were drops to \$11.80 and \$11.62, respectively, and in 1910 an advance to \$12.69. In the 10 identical plants reporting for 1910, 1911, and 1912, the average for 1910 was also \$12.69. There was a decrease to \$12.39 in 1911 and



an increase to \$12.64 in 1912. Despite the fact that the two reports for 1910 are the same, it would not be an accurate comparison to state that earnings increased from \$12.12 in 1907 to \$12.64 in 1912, because one more plant is included in the 1912 average than in that for 1907. In the second group of 10 plants the full-time weekly earnings were \$12.68 in 1912 and \$14.38 in 1913. In the third group of 10 identical plants the full-time weekly earnings were \$14.43 in 1913 and \$14.57 in 1914. In the group of 12 plants for 1914 and 1915 the full-time weekly earnings decreased to \$14.27 and \$14.31, respectively.

Comparing the average full-time weekly earnings for 1915 of the several occupations, it is seen that the lowest average was that of laborers, which was \$14.31. The averages of the other 18 occupations for this department show 7 with a range between \$15.42 and \$18.43, 8 ranging between \$21.18 and \$25.90, and 1 each at \$27.96 for steel pourers, \$30.87 for vessel men, and \$35.61 for blowers. The averages for all other occupations in this department, which are shown only for the years 1914 and 1915, are, respectively, \$16.23 and \$16.93 for the unclassified productive and \$16.81 and \$16.79 for the nonproductive occupations.

#### INDEX NUMBERS.

Owing to changes in the number of plants reported from year to year, and the consequent differences in the averages for the overlapping year in two groups, it is difficult to make a comparison of the actual data over a period of several years which will give an accurate measure of the changes throughout the period. To aid in making such a comparison, relative or index numbers have been computed from the averages given in Table 16 for full-time hours per week, rates of wages per hour, and full-time weekly earnings for each occupation from 1907 to 1915, inclusive. Such figures appear in Table 17. These relative or index numbers are simply percentages for which the data for 1915 are taken as the base, or 100 per cent. The relative for each year is the per cent that the average for that year is of the average for 1915. For example, the relative full-time weekly earnings of stockers in 1907 were 96, as compared with 100 in 1915; that is, the full-time weekly earnings of stockers in 1907 were 96 per cent of the full-time weekly earnings in this occupation in 1915. The method of computing relative numbers is explained on pages 65 to 67.

Table 17 also shows for each occupation the per cent of increase or decrease in full-time hours per week, rates of wages per hour, and full-time weekly earnings in 1915 as compared with each specified year preceding. Thus, the full-time weekly earnings of stockers in 1915 were 4 per cent higher than in 1907, the same as in 1908, 3 per

cent lower than in 1909, 7 per cent lower than in 1910, 10 per cent higher than in 1911, 16 per cent lower than in 1912, 23 per cent lower than in 1913, and 10 per cent lower than in 1914.

In other columns of the table is shown the per cent of change in each year as compared with the year immediately preceding. Thus, the full-time weekly earnings of stockers in 1908 were 4 per cent higher than in 1907, 3 per cent higher in 1909 than in 1908, 5 per cent higher in 1910 than in 1909, 16 per cent lower in 1911 than in 1910, 31 per cent higher in 1912 than in 1911, 9 per cent higher in 1913 than in 1912, 15 per cent lower in 1914 than in 1913, and 10 per cent lower in 1915 than in 1914. The other occupations and items of the table may be studied in like manner. The percentages of increase and decrease are computed from the relative numbers.

TABLE 17.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1907 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATIONS—BESSEMER CONVERTERS.

| Occupation and year.   | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                        | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in— |                                                      |
|                        |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| <b>Stockers:</b>       |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....              | 102                                | — 2                                          | .....                                                | 95                               | + 5                                          | .....                                                | 96                                  | + 4                                          | .....                                                |
| 1908.....              | 95                                 | + 5                                          | — 7                                                  | 106                              | — 6                                          | +12                                                  | 100                                 | ( <sup>1</sup> )                             | + 4                                                  |
| 1909.....              | 104                                | — 4                                          | + 9                                                  | 102                              | — 2                                          | — 4                                                  | 103                                 | — 3                                          | + 3                                                  |
| 1910.....              | 106                                | — 6                                          | + 2                                                  | 102                              | — 2                                          | ( <sup>1</sup> )                                     | 108                                 | — 7                                          | + 5                                                  |
| 1911.....              | 101                                | — 1                                          | — 5                                                  | 90                               | +11                                          | —12                                                  | 91                                  | +10                                          | —16                                                  |
| 1912.....              | 101                                | — 1                                          | ( <sup>1</sup> )                                     | 120                              | —17                                          | +33                                                  | 119                                 | —16                                          | +31                                                  |
| 1913.....              | 102                                | — 2                                          | + 1                                                  | 130                              | —23                                          | + 8                                                  | 130                                 | —23                                          | + 9                                                  |
| 1914.....              | 100                                | ( <sup>1</sup> )                             | — 2                                                  | 112                              | —11                                          | —14                                                  | 111                                 | —10                                          | —15                                                  |
| 1915.....              | 100                                | .....                                        | ( <sup>1</sup> )                                     | 100                              | .....                                        | —11                                                  | 100                                 | .....                                        | —10                                                  |
| <b>Cupola melters:</b> |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....              | 106                                | — 6                                          | .....                                                | 134                              | —25                                          | .....                                                | 145                                 | —31                                          | .....                                                |
| 1908.....              | 105                                | — 5                                          | — 1                                                  | 92                               | + 9                                          | —31                                                  | 101                                 | — 1                                          | —30                                                  |
| 1909.....              | 105                                | — 5                                          | ( <sup>1</sup> )                                     | 111                              | —10                                          | +21                                                  | 119                                 | —16                                          | +18                                                  |
| 1910.....              | 98                                 | + 2                                          | — 7                                                  | 118                              | —15                                          | + 6                                                  | 118                                 | —15                                          | — 1                                                  |
| 1911.....              | 104                                | — 4                                          | + 6                                                  | 103                              | — 3                                          | —13                                                  | 112                                 | —11                                          | — 5                                                  |
| 1912.....              | 99                                 | + 1                                          | + 5                                                  | 109                              | — 8                                          | + 6                                                  | 108                                 | — 7                                          | — 4                                                  |
| 1913.....              | 100                                | ( <sup>1</sup> )                             | + 1                                                  | 127                              | —21                                          | +17                                                  | 128                                 | —22                                          | +19                                                  |
| 1914.....              | 100                                | ( <sup>1</sup> )                             | ( <sup>1</sup> )                                     | 87                               | +15                                          | —31                                                  | 89                                  | +12                                          | —30                                                  |
| 1915.....              | 100                                | .....                                        | ( <sup>1</sup> )                                     | 100                              | .....                                        | +15                                                  | 100                                 | .....                                        | +12                                                  |
| <b>Cupola tappers:</b> |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....              | 106                                | — 6                                          | .....                                                | 137                              | —27                                          | .....                                                | 146                                 | —32                                          | .....                                                |
| 1908.....              | 104                                | — 4                                          | — 2                                                  | 121                              | —17                                          | —12                                                  | 130                                 | —23                                          | —11                                                  |
| 1909.....              | 107                                | — 7                                          | + 3                                                  | 123                              | —19                                          | + 2                                                  | 130                                 | —23                                          | ( <sup>1</sup> )                                     |
| 1910.....              | 103                                | — 3                                          | — 4                                                  | 131                              | —24                                          | + 7                                                  | 134                                 | —25                                          | + 3                                                  |
| 1911.....              | 104                                | — 4                                          | + 1                                                  | 115                              | —13                                          | —12                                                  | 120                                 | —17                                          | —10                                                  |
| 1912.....              | 104                                | — 4                                          | ( <sup>1</sup> )                                     | 135                              | —26                                          | +17                                                  | 137                                 | —27                                          | +14                                                  |
| 1913.....              | 102                                | — 2                                          | — 2                                                  | 144                              | —31                                          | + 7                                                  | 145                                 | —31                                          | + 6                                                  |
| 1914.....              | 102                                | — 2                                          | ( <sup>1</sup> )                                     | 86                               | +16                                          | —40                                                  | 89                                  | +12                                          | —39                                                  |
| 1915.....              | 100                                | .....                                        | — 2                                                  | 100                              | .....                                        | +16                                                  | 100                                 | .....                                        | +12                                                  |

<sup>1</sup> No change.

TABLE 17.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1907 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATIONS—BESSEMER CONVERTERS—Continued.

| Occupation and year.         | Hours per week.                                         |                                                                     |                                                                                       | Wages per hour.                                   |                                                                     |                                                                                       | Weekly earnings.                                           |                                                                     |                                                                                       |
|------------------------------|---------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                              | Rela-<br>tive<br>full-<br>time<br>hours<br>per<br>week. | Per cent of in-<br>crease (+) or<br>decrease (—)<br>in—             |                                                                                       | Rela-<br>tive<br>rate of<br>wages<br>per<br>hour. | Per cent of in-<br>crease (+) or<br>decrease (—)<br>in—             |                                                                                       | Rela-<br>tive<br>full-<br>time<br>weekly<br>earn-<br>ings. | Per cent of in-<br>crease (+) or<br>decrease (—)<br>in—             |                                                                                       |
|                              |                                                         | 1915 as<br>com-<br>pared<br>with<br>each<br>speci-<br>fied<br>year. | Each<br>speci-<br>fied<br>year as<br>com-<br>pared<br>with<br>year<br>pre-<br>ceding. |                                                   | 1915 as<br>com-<br>pared<br>with<br>each<br>speci-<br>fied<br>year. | Each<br>speci-<br>fied<br>year as<br>com-<br>pared<br>with<br>year<br>pre-<br>ceding. |                                                            | 1915 as<br>com-<br>pared<br>with<br>each<br>speci-<br>fied<br>year. | Each<br>speci-<br>fied<br>year as<br>com-<br>pared<br>with<br>year<br>pre-<br>ceding. |
| <b>Blowers:</b>              |                                                         |                                                                     |                                                                                       |                                                   |                                                                     |                                                                                       |                                                            |                                                                     |                                                                                       |
| 1907.....                    | 100                                                     | (1)                                                                 | .....                                                                                 | 109                                               | — 8                                                                 | .....                                                                                 | 107                                                        | — 7                                                                 | .....                                                                                 |
| 1908.....                    | 105                                                     | — 5                                                                 | + 5                                                                                   | 82                                                | +22                                                                 | —25                                                                                   | 88                                                         | +14                                                                 | —18                                                                                   |
| 1909.....                    | 105                                                     | — 5                                                                 | (1)                                                                                   | 86                                                | +16                                                                 | + 5                                                                                   | 90                                                         | +11                                                                 | + 2                                                                                   |
| 1910.....                    | 107                                                     | — 7                                                                 | + 2                                                                                   | 95                                                | + 5                                                                 | +10                                                                                   | 100                                                        | (1)                                                                 | +11                                                                                   |
| 1911.....                    | 110                                                     | — 9                                                                 | + 3                                                                                   | 88                                                | +14                                                                 | — 7                                                                                   | 97                                                         | + 3                                                                 | — 3                                                                                   |
| 1912.....                    | 106                                                     | — 6                                                                 | — 4                                                                                   | 94                                                | + 6                                                                 | + 7                                                                                   | 100                                                        | (1)                                                                 | + 3                                                                                   |
| 1913.....                    | 97                                                      | + 3                                                                 | — 8                                                                                   | 107                                               | — 7                                                                 | +14                                                                                   | 102                                                        | — 2                                                                 | + 2                                                                                   |
| 1914.....                    | 100                                                     | (1)                                                                 | + 3                                                                                   | 97                                                | + 3                                                                 | — 9                                                                                   | 97                                                         | + 3                                                                 | — 5                                                                                   |
| 1915.....                    | 100                                                     |                                                                     | (1)                                                                                   | 100                                               |                                                                     | + 3                                                                                   | 100                                                        |                                                                     | + 3                                                                                   |
| <b>Regulators, first:</b>    |                                                         |                                                                     |                                                                                       |                                                   |                                                                     |                                                                                       |                                                            |                                                                     |                                                                                       |
| 1907.....                    | 94                                                      | + 6                                                                 | .....                                                                                 | 130                                               | —23                                                                 | .....                                                                                 | 122                                                        | —18                                                                 | .....                                                                                 |
| 1908.....                    | 97                                                      | + 3                                                                 | + 3                                                                                   | 79                                                | +27                                                                 | —39                                                                                   | 79                                                         | +27                                                                 | —35                                                                                   |
| 1909.....                    | 97                                                      | + 3                                                                 | (1)                                                                                   | 102                                               | — 2                                                                 | +29                                                                                   | 103                                                        | — 3                                                                 | +30                                                                                   |
| 1910.....                    | 92                                                      | + 9                                                                 | — 5                                                                                   | 123                                               | —19                                                                 | +21                                                                                   | 114                                                        | —12                                                                 | +11                                                                                   |
| 1911.....                    | 99                                                      | + 1                                                                 | + 8                                                                                   | 113                                               | —12                                                                 | — 8                                                                                   | 111                                                        | —10                                                                 | — 3                                                                                   |
| 1912.....                    | 96                                                      | + 4                                                                 | — 3                                                                                   | 124                                               | —19                                                                 | +10                                                                                   | 118                                                        | —15                                                                 | + 6                                                                                   |
| 1913.....                    | 95                                                      | + 5                                                                 | — 1                                                                                   | 140                                               | —29                                                                 | +13                                                                                   | 131                                                        | —24                                                                 | +11                                                                                   |
| 1914.....                    | 99                                                      | + 1                                                                 | + 4                                                                                   | 93                                                | + 8                                                                 | —34                                                                                   | 90                                                         | +11                                                                 | —31                                                                                   |
| 1915.....                    | 100                                                     |                                                                     | + 1                                                                                   | 100                                               |                                                                     | + 8                                                                                   | 100                                                        |                                                                     | +11                                                                                   |
| <b>Regulators, second:</b>   |                                                         |                                                                     |                                                                                       |                                                   |                                                                     |                                                                                       |                                                            |                                                                     |                                                                                       |
| 1907.....                    | 103                                                     | — 3                                                                 | .....                                                                                 | 127                                               | —21                                                                 | .....                                                                                 | 128                                                        | —22                                                                 | .....                                                                                 |
| 1908.....                    | 116                                                     | —14                                                                 | +13                                                                                   | 80                                                | +25                                                                 | —37                                                                                   | 90                                                         | +11                                                                 | —30                                                                                   |
| 1909.....                    | 116                                                     | —14                                                                 | (1)                                                                                   | 108                                               | — 7                                                                 | +35                                                                                   | 123                                                        | —19                                                                 | +37                                                                                   |
| 1910.....                    | 105                                                     | — 5                                                                 | — 9                                                                                   | 120                                               | —17                                                                 | +11                                                                                   | 124                                                        | —19                                                                 | + 1                                                                                   |
| 1911.....                    | 101                                                     | — 1                                                                 | — 4                                                                                   | 105                                               | — 5                                                                 | —12                                                                                   | 104                                                        | — 4                                                                 | —16                                                                                   |
| 1912.....                    | 99                                                      | + 1                                                                 | — 2                                                                                   | 116                                               | —14                                                                 | +10                                                                                   | 113                                                        | —12                                                                 | + 9                                                                                   |
| 1913.....                    | 99                                                      | + 1                                                                 | (1)                                                                                   | 125                                               | —20                                                                 | + 8                                                                                   | 122                                                        | —18                                                                 | + 8                                                                                   |
| 1914.....                    | 100                                                     | (1)                                                                 | + 1                                                                                   | 89                                                | +12                                                                 | —29                                                                                   | 87                                                         | +15                                                                 | —29                                                                                   |
| 1915.....                    | 100                                                     |                                                                     | (1)                                                                                   | 100                                               |                                                                     | +12                                                                                   | 100                                                        |                                                                     | +15                                                                                   |
| <b>Vessel men:</b>           |                                                         |                                                                     |                                                                                       |                                                   |                                                                     |                                                                                       |                                                            |                                                                     |                                                                                       |
| 1907.....                    | 108                                                     | — 7                                                                 | .....                                                                                 | 137                                               | —27                                                                 | .....                                                                                 | 144                                                        | —31                                                                 | .....                                                                                 |
| 1908.....                    | 113                                                     | —12                                                                 | + 5                                                                                   | 92                                                | + 9                                                                 | —33                                                                                   | 101                                                        | — 1                                                                 | —30                                                                                   |
| 1909.....                    | 113                                                     | —12                                                                 | (1)                                                                                   | 109                                               | — 8                                                                 | +18                                                                                   | 120                                                        | —17                                                                 | +19                                                                                   |
| 1910.....                    | 104                                                     | — 4                                                                 | — 8                                                                                   | 123                                               | —19                                                                 | +13                                                                                   | 125                                                        | —20                                                                 | + 4                                                                                   |
| 1911.....                    | 107                                                     | — 7                                                                 | + 3                                                                                   | 104                                               | — 4                                                                 | —15                                                                                   | 107                                                        | — 7                                                                 | —14                                                                                   |
| 1912.....                    | 103                                                     | — 3                                                                 | — 4                                                                                   | 126                                               | —21                                                                 | +21                                                                                   | 126                                                        | —21                                                                 | +18                                                                                   |
| 1913.....                    | 102                                                     | — 2                                                                 | — 1                                                                                   | 136                                               | —26                                                                 | + 8                                                                                   | 134                                                        | —25                                                                 | + 6                                                                                   |
| 1914.....                    | 99                                                      | + 1                                                                 | — 3                                                                                   | 90                                                | +11                                                                 | —34                                                                                   | 90                                                         | +11                                                                 | —33                                                                                   |
| 1915.....                    | 100                                                     |                                                                     | + 1                                                                                   | 100                                               |                                                                     | +11                                                                                   | 100                                                        |                                                                     | +11                                                                                   |
| <b>Vessel men's helpers:</b> |                                                         |                                                                     |                                                                                       |                                                   |                                                                     |                                                                                       |                                                            |                                                                     |                                                                                       |
| 1907.....                    | 106                                                     | — 6                                                                 | .....                                                                                 | 143                                               | —30                                                                 | .....                                                                                 | 151                                                        | —34                                                                 | .....                                                                                 |
| 1908.....                    | 111                                                     | —10                                                                 | + 5                                                                                   | 95                                                | + 5                                                                 | —34                                                                                   | 103                                                        | — 3                                                                 | —32                                                                                   |
| 1909.....                    | 111                                                     | —10                                                                 | (1)                                                                                   | 123                                               | —19                                                                 | +29                                                                                   | 134                                                        | —25                                                                 | +30                                                                                   |
| 1910.....                    | 103                                                     | — 3                                                                 | — 7                                                                                   | 133                                               | —25                                                                 | + 8                                                                                   | 137                                                        | —27                                                                 | + 2                                                                                   |
| 1911.....                    | 105                                                     | — 5                                                                 | + 2                                                                                   | 111                                               | —10                                                                 | —17                                                                                   | 114                                                        | —12                                                                 | —17                                                                                   |
| 1912.....                    | 102                                                     | — 2                                                                 | — 3                                                                                   | 123                                               | —19                                                                 | +11                                                                                   | 123                                                        | —19                                                                 | + 8                                                                                   |
| 1913.....                    | 101                                                     | — 1                                                                 | — 1                                                                                   | 140                                               | —29                                                                 | +14                                                                                   | 139                                                        | —28                                                                 | +13                                                                                   |
| 1914.....                    | 98                                                      | + 2                                                                 | — 3                                                                                   | 89                                                | +12                                                                 | —36                                                                                   | 87                                                         | +15                                                                 | —37                                                                                   |
| 1915.....                    | 100                                                     |                                                                     | + 2                                                                                   | 100                                               |                                                                     | +12                                                                                   | 100                                                        |                                                                     | +15                                                                                   |
| <b>Cinder pitmen:</b>        |                                                         |                                                                     |                                                                                       |                                                   |                                                                     |                                                                                       |                                                            |                                                                     |                                                                                       |
| 1907.....                    | 97                                                      | + 3                                                                 | .....                                                                                 | 89                                                | +12                                                                 | .....                                                                                 | 83                                                         | +20                                                                 | .....                                                                                 |
| 1908.....                    | 94                                                      | + 6                                                                 | — 3                                                                                   | 75                                                | +33                                                                 | —16                                                                                   | 70                                                         | +43                                                                 | —16                                                                                   |
| 1909.....                    | 97                                                      | + 3                                                                 | + 3                                                                                   | 77                                                | +30                                                                 | + 3                                                                                   | 74                                                         | +35                                                                 | + 6                                                                                   |
| 1910.....                    | 96                                                      | + 4                                                                 | — 1                                                                                   | 92                                                | + 9                                                                 | +19                                                                                   | 85                                                         | +18                                                                 | +15                                                                                   |
| 1911.....                    | 99                                                      | + 1                                                                 | + 3                                                                                   | 87                                                | +15                                                                 | — 5                                                                                   | 85                                                         | +18                                                                 | (1)                                                                                   |
| 1912.....                    | 95                                                      | + 5                                                                 | — 4                                                                                   | 89                                                | +12                                                                 | + 2                                                                                   | 83                                                         | +20                                                                 | — 2                                                                                   |
| 1913.....                    | 94                                                      | + 6                                                                 | — 1                                                                                   | 106                                               | — 6                                                                 | +19                                                                                   | 97                                                         | + 3                                                                 | +17                                                                                   |
| 1914.....                    | 100                                                     | (1)                                                                 | + 6                                                                                   | 100                                               | (1)                                                                 | — 6                                                                                   | 100                                                        | + 1                                                                 | + 2                                                                                   |
| 1915.....                    | 100                                                     |                                                                     | (1)                                                                                   | 100                                               |                                                                     | (1)                                                                                   | 100                                                        |                                                                     | + 1                                                                                   |

<sup>1</sup> No change.

## 120 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

TABLE 17.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1907 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATIONS—BESSEMER CONVERTERS—Continued.

| Occupation and year.           | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|--------------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                                | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in— |                                                      |
|                                |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| <b>Bottom makers:</b>          |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                      | 100                                | (1)                                          | .....                                                | 113                              | -12                                          | .....                                                | 114                                 | -12                                          | .....                                                |
| 1908.....                      | 99                                 | + 1                                          | - 1                                                  | 83                               | +20                                          | -27                                                  | 83                                  | +20                                          | -27                                                  |
| 1909.....                      | 100                                | (1)                                          | + 1                                                  | 103                              | - 3                                          | +24                                                  | 103                                 | - 3                                          | +24                                                  |
| 1910.....                      | 100                                | (1)                                          | (1)                                                  | 104                              | - 4                                          | + 1                                                  | 105                                 | - 5                                          | + 2                                                  |
| 1911.....                      | 98                                 | + 2                                          | - 2                                                  | 101                              | - 1                                          | - 3                                                  | 100                                 | (1)                                          | - 5                                                  |
| 1912.....                      | 99                                 | + 1                                          | + 1                                                  | 104                              | - 4                                          | + 3                                                  | 104                                 | - 4                                          | + 4                                                  |
| 1913.....                      | 101                                | - 1                                          | + 2                                                  | 116                              | -14                                          | +12                                                  | 116                                 | -14                                          | +12                                                  |
| 1914.....                      | 100                                | (1)                                          | - 1                                                  | 88                               | +14                                          | -24                                                  | 89                                  | +12                                          | -23                                                  |
| 1915.....                      | 100                                | .....                                        | (1)                                                  | 100                              | .....                                        | +14                                                  | 100                                 | .....                                        | +12                                                  |
| <b>Bottom makers' helpers:</b> |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                      | 101                                | - 1                                          | .....                                                | 99                               | + 1                                          | .....                                                | 100                                 | (1)                                          | .....                                                |
| 1908.....                      | 99                                 | + 1                                          | - 2                                                  | 79                               | +27                                          | -20                                                  | 79                                  | +27                                          | -21                                                  |
| 1909.....                      | 101                                | - 1                                          | + 2                                                  | 90                               | +11                                          | +14                                                  | 91                                  | +10                                          | +15                                                  |
| 1910.....                      | 100                                | (1)                                          | - 1                                                  | 92                               | + 9                                          | + 2                                                  | 93                                  | + 8                                          | + 2                                                  |
| 1911.....                      | 100                                | (1)                                          | (1)                                                  | 92                               | + 9                                          | (1)                                                  | 92                                  | + 9                                          | - 1                                                  |
| 1912.....                      | 100                                | (1)                                          | (1)                                                  | 93                               | + 8                                          | + 1                                                  | 93                                  | + 8                                          | + 1                                                  |
| 1913.....                      | 101                                | - 1                                          | + 1                                                  | 106                              | - 6                                          | +14                                                  | 107                                 | - 7                                          | +15                                                  |
| 1914.....                      | 100                                | (1)                                          | - 1                                                  | 94                               | + 6                                          | -11                                                  | 94                                  | + 6                                          | -12                                                  |
| 1915.....                      | 100                                | .....                                        | (1)                                                  | 100                              | .....                                        | + 6                                                  | 100                                 | .....                                        | + 6                                                  |
| <b>Ladle liners:</b>           |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                      | 96                                 | + 4                                          | .....                                                | 136                              | -26                                          | .....                                                | 128                                 | -22                                          | .....                                                |
| 1908.....                      | 97                                 | + 3                                          | + 1                                                  | 92                               | + 9                                          | -32                                                  | 88                                  | +14                                          | -31                                                  |
| 1909.....                      | 96                                 | + 4                                          | - 1                                                  | 117                              | -15                                          | +27                                                  | 112                                 | -11                                          | +27                                                  |
| 1910.....                      | 98                                 | + 2                                          | + 2                                                  | 115                              | -13                                          | - 2                                                  | 112                                 | -11                                          | (1)                                                  |
| 1911.....                      | 100                                | (1)                                          | + 2                                                  | 104                              | - 4                                          | -10                                                  | 102                                 | - 2                                          | - 9                                                  |
| 1912.....                      | 101                                | - 1                                          | + 1                                                  | 112                              | -11                                          | + 8                                                  | 111                                 | -10                                          | + 9                                                  |
| 1913.....                      | 101                                | - 1                                          | (1)                                                  | 122                              | -18                                          | + 9                                                  | 122                                 | -18                                          | +10                                                  |
| 1914.....                      | 100                                | (1)                                          | - 1                                                  | 88                               | +14                                          | -28                                                  | 89                                  | +12                                          | -27                                                  |
| 1915.....                      | 100                                | .....                                        | (1)                                                  | 100                              | .....                                        | +14                                                  | 100                                 | .....                                        | +12                                                  |
| <b>Ladle liners' helpers:</b>  |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                      | 101                                | - 1                                          | .....                                                | 103                              | - 3                                          | .....                                                | 102                                 | - 2                                          | .....                                                |
| 1908.....                      | 99                                 | + 1                                          | - 2                                                  | 85                               | +18                                          | -17                                                  | 84                                  | +19                                          | -18                                                  |
| 1909.....                      | 101                                | - 1                                          | + 2                                                  | 93                               | + 8                                          | + 9                                                  | 93                                  | + 8                                          | +11                                                  |
| 1910.....                      | 101                                | - 1                                          | (1)                                                  | 97                               | + 3                                          | + 4                                                  | 97                                  | + 3                                          | + 4                                                  |
| 1911.....                      | 102                                | - 2                                          | + 1                                                  | 96                               | + 4                                          | - 1                                                  | 97                                  | + 3                                          | (1)                                                  |
| 1912.....                      | 102                                | - 2                                          | (1)                                                  | 94                               | + 6                                          | - 2                                                  | 95                                  | + 5                                          | - 2                                                  |
| 1913.....                      | 103                                | - 3                                          | + 1                                                  | 105                              | - 5                                          | +12                                                  | 107                                 | - 7                                          | +13                                                  |
| 1914.....                      | 99                                 | + 1                                          | - 4                                                  | 95                               | + 5                                          | -10                                                  | 96                                  | + 4                                          | -10                                                  |
| 1915.....                      | 100                                | .....                                        | + 1                                                  | 100                              | .....                                        | + 5                                                  | 100                                 | .....                                        | + 4                                                  |
| <b>Stopper makers:</b>         |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                      | 105                                | - 5                                          | .....                                                | 118                              | -15                                          | .....                                                | 125                                 | -20                                          | .....                                                |
| 1908.....                      | 105                                | - 5                                          | (1)                                                  | 83                               | +29                                          | -30                                                  | 88                                  | +14                                          | -30                                                  |
| 1909.....                      | 103                                | - 3                                          | - 2                                                  | 101                              | - 1                                          | +22                                                  | 105                                 | - 5                                          | +19                                                  |
| 1910.....                      | 105                                | - 5                                          | + 2                                                  | 98                               | + 2                                          | - 3                                                  | 105                                 | - 5                                          | (1)                                                  |
| 1911.....                      | 104                                | - 4                                          | - 1                                                  | 103                              | - 3                                          | + 5                                                  | 107                                 | - 7                                          | + 2                                                  |
| 1912.....                      | 102                                | - 2                                          | - 2                                                  | 103                              | - 3                                          | (1)                                                  | 104                                 | - 4                                          | - 3                                                  |
| 1913.....                      | 102                                | - 2                                          | (1)                                                  | 114                              | -12                                          | +11                                                  | 117                                 | -15                                          | +13                                                  |
| 1914.....                      | 101                                | - 1                                          | - 1                                                  | 95                               | + 5                                          | -17                                                  | 97                                  | + 3                                          | -17                                                  |
| 1915.....                      | 100                                | .....                                        | - 1                                                  | 100                              | .....                                        | + 5                                                  | 100                                 | .....                                        | + 3                                                  |
| <b>Stopper setters:</b>        |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                      | 101                                | - 1                                          | .....                                                | 150                              | -33                                          | .....                                                | 147                                 | -32                                          | .....                                                |
| 1908.....                      | 107                                | - 7                                          | + 6                                                  | 82                               | +22                                          | -45                                                  | 85                                  | +18                                          | -42                                                  |
| 1909.....                      | 109                                | - 8                                          | + 2                                                  | 131                              | -24                                          | +60                                                  | 135                                 | -26                                          | +59                                                  |
| 1910.....                      | 101                                | - 1                                          | - 7                                                  | 140                              | -29                                          | + 7                                                  | 139                                 | -28                                          | + 3                                                  |
| 1911.....                      | 106                                | - 6                                          | + 5                                                  | 121                              | -17                                          | -14                                                  | 121                                 | -17                                          | -13                                                  |
| 1912.....                      | 99                                 | + 1                                          | - 7                                                  | 120                              | -17                                          | - 1                                                  | 118                                 | -15                                          | - 2                                                  |
| 1913.....                      | 99                                 | + 1                                          | (1)                                                  | 135                              | -26                                          | +13                                                  | 132                                 | -24                                          | +12                                                  |
| 1914.....                      | 98                                 | + 2                                          | - 1                                                  | 83                               | +12                                          | -34                                                  | 88                                  | +14                                          | -33                                                  |
| 1915.....                      | 100                                | .....                                        | + 2                                                  | 100                              | .....                                        | +12                                                  | 100                                 | .....                                        | +14                                                  |

<sup>1</sup> No change.

TABLE 17.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1907 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATIONS—BESSEMER CONVERTERS—Concluded.

| Occupation and year.               | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|------------------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                                    | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in— |                                                      |
|                                    |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| <b>Steel pourers:</b>              |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                          | 106                                | — 6                                          | —                                                    | 133                              | —25                                          | —                                                    | 133                                 | —25                                          | —                                                    |
| 1908.....                          | 109                                | — 8                                          | + 3                                                  | 85                               | +18                                          | —36                                                  | 89                                  | +12                                          | —33                                                  |
| 1909.....                          | 110                                | — 9                                          | + 1                                                  | 111                              | —10                                          | +31                                                  | 116                                 | —14                                          | +30                                                  |
| 1910.....                          | 104                                | — 4                                          | — 5                                                  | 121                              | —17                                          | + 9                                                  | 121                                 | —17                                          | + 4                                                  |
| 1911.....                          | 103                                | — 3                                          | — 1                                                  | 105                              | — 5                                          | —13                                                  | 103                                 | — 3                                          | —15                                                  |
| 1912.....                          | 102                                | — 2                                          | — 1                                                  | 114                              | —12                                          | + 9                                                  | 113                                 | —12                                          | +10                                                  |
| 1913.....                          | 102                                | — 2                                          | ( <sup>1</sup> )                                     | 126                              | —21                                          | +11                                                  | 125                                 | —20                                          | +11                                                  |
| 1914.....                          | 98                                 | + 2                                          | — 4                                                  | 85                               | +18                                          | —33                                                  | 84                                  | +19                                          | —33                                                  |
| 1915.....                          | 100                                | —                                            | + 2                                                  | 100                              | —                                            | +18                                                  | 100                                 | —                                            | +19                                                  |
| <b>Mold cappers:</b>               |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                          | 96                                 | + 4                                          | —                                                    | 109                              | — 8                                          | —                                                    | 102                                 | — 2                                          | —                                                    |
| 1908.....                          | 95                                 | + 5                                          | — 1                                                  | 62                               | +61                                          | —43                                                  | 60                                  | +67                                          | —41                                                  |
| 1909.....                          | 95                                 | + 5                                          | ( <sup>1</sup> )                                     | 85                               | +18                                          | +37                                                  | 80                                  | +25                                          | +33                                                  |
| 1910.....                          | 97                                 | + 3                                          | + 2                                                  | 103                              | — 3                                          | +21                                                  | 96                                  | + 4                                          | +20                                                  |
| 1911.....                          | 109                                | — 8                                          | +12                                                  | 92                               | + 9                                          | —11                                                  | 99                                  | + 1                                          | + 3                                                  |
| 1912.....                          | 101                                | — 1                                          | — 7                                                  | 106                              | — 6                                          | +15                                                  | 102                                 | — 2                                          | + 3                                                  |
| 1913.....                          | 98                                 | + 2                                          | — 3                                                  | 127                              | —21                                          | +20                                                  | 120                                 | —17                                          | +18                                                  |
| 1914.....                          | 100                                | ( <sup>1</sup> )                             | + 2                                                  | 88                               | +14                                          | —31                                                  | 89                                  | +12                                          | —26                                                  |
| 1915.....                          | 100                                | —                                            | ( <sup>1</sup> )                                     | 100                              | —                                            | +14                                                  | 100                                 | —                                            | +12                                                  |
| <b>Ingot strippers:</b>            |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                          | 95                                 | + 5                                          | —                                                    | 95                               | + 5                                          | —                                                    | 87                                  | +15                                          | —                                                    |
| 1908.....                          | 97                                 | + 3                                          | + 2                                                  | 73                               | +37                                          | —23                                                  | 72                                  | +39                                          | —17                                                  |
| 1909.....                          | 99                                 | + 1                                          | + 2                                                  | 81                               | +23                                          | +11                                                  | 81                                  | +23                                          | +13                                                  |
| 1910.....                          | 96                                 | + 4                                          | — 3                                                  | 94                               | + 6                                          | +16                                                  | 88                                  | +14                                          | + 9                                                  |
| 1911.....                          | 99                                 | + 1                                          | + 3                                                  | 87                               | +15                                          | — 7                                                  | 86                                  | +16                                          | — 2                                                  |
| 1912.....                          | 97                                 | + 3                                          | — 2                                                  | 99                               | + 1                                          | +14                                                  | 93                                  | + 8                                          | + 8                                                  |
| 1913.....                          | 99                                 | + 1                                          | + 2                                                  | 104                              | — 4                                          | + 5                                                  | 102                                 | — 2                                          | +10                                                  |
| 1914.....                          | 100                                | ( <sup>1</sup> )                             | + 1                                                  | 94                               | + 6                                          | —10                                                  | 94                                  | + 6                                          | — 8                                                  |
| 1915.....                          | 100                                | —                                            | ( <sup>1</sup> )                                     | 100                              | —                                            | + 6                                                  | 100                                 | —                                            | + 6                                                  |
| <b>Laborers:</b>                   |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                          | 103                                | — 3                                          | —                                                    | 81                               | +23                                          | —                                                    | 84                                  | +19                                          | —                                                    |
| 1908.....                          | 100                                | ( <sup>1</sup> )                             | — 3                                                  | 81                               | +23                                          | ( <sup>1</sup> )                                     | 81                                  | +23                                          | — 4                                                  |
| 1909.....                          | 101                                | — 1                                          | + 1                                                  | 79                               | +27                                          | — 2                                                  | 80                                  | +25                                          | + 1                                                  |
| 1910.....                          | 103                                | — 3                                          | + 2                                                  | 85                               | +18                                          | + 8                                                  | 87                                  | +15                                          | + 9                                                  |
| 1911.....                          | 98                                 | + 2                                          | — 5                                                  | 87                               | +15                                          | + 2                                                  | 85                                  | +18                                          | — 2                                                  |
| 1912.....                          | 100                                | ( <sup>1</sup> )                             | + 2                                                  | 87                               | +15                                          | ( <sup>1</sup> )                                     | 87                                  | +15                                          | + 2                                                  |
| 1913.....                          | 99                                 | + 1                                          | — 1                                                  | 100                              | ( <sup>1</sup> )                             | +15                                                  | 99                                  | + 1                                          | +14                                                  |
| 1914.....                          | 100                                | ( <sup>1</sup> )                             | + 1                                                  | 100                              | ( <sup>1</sup> )                             | ( <sup>1</sup> )                                     | 100                                 | ( <sup>1</sup> )                             | + 1                                                  |
| 1915.....                          | 100                                | —                                            | ( <sup>1</sup> )                                     | 100                              | —                                            | ( <sup>1</sup> )                                     | 100                                 | —                                            | ( <sup>1</sup> )                                     |
| <b>Unclassified—productive:</b>    |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1914.....                          | 100                                | ( <sup>1</sup> )                             | —                                                    | 96                               | + 4                                          | —                                                    | 96                                  | + 4                                          | —                                                    |
| 1915.....                          | 100                                | —                                            | ( <sup>1</sup> )                                     | 100                              | —                                            | + 4                                                  | 100                                 | —                                            | + 4                                                  |
| <b>Unclassified—nonproductive:</b> |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1914.....                          | 99                                 | + 1                                          | —                                                    | 101                              | — 1                                          | —                                                    | 100                                 | ( <sup>1</sup> )                             | —                                                    |
| 1915.....                          | 100                                | —                                            | + 1                                                  | 100                              | —                                            | — 1                                                  | 100                                 | —                                            | ( <sup>1</sup> )                                     |
| <b>All occupations:</b>            |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                          | 103                                | — 3                                          | —                                                    | 95                               | + 5                                          | —                                                    | 96                                  | + 4                                          | —                                                    |
| 1908.....                          | 99                                 | + 1                                          | — 4                                                  | 89                               | +12                                          | — 6                                                  | 88                                  | +14                                          | — 8                                                  |
| 1909.....                          | 103                                | — 3                                          | + 4                                                  | 92                               | + 9                                          | + 3                                                  | 93                                  | + 8                                          | + 6                                                  |
| 1910.....                          | 103                                | — 3                                          | ( <sup>1</sup> )                                     | 96                               | + 4                                          | + 4                                                  | 98                                  | + 2                                          | + 5                                                  |
| 1911.....                          | 101                                | — 1                                          | — 2                                                  | 92                               | + 9                                          | — 4                                                  | 93                                  | + 8                                          | — 5                                                  |
| 1912.....                          | 101                                | — 1                                          | ( <sup>1</sup> )                                     | 102                              | — 2                                          | +11                                                  | 100                                 | ( <sup>1</sup> )                             | + 8                                                  |
| 1913.....                          | 100                                | ( <sup>1</sup> )                             | — 1                                                  | 113                              | —12                                          | +11                                                  | 111                                 | —10                                          | +11                                                  |
| 1914.....                          | 100                                | ( <sup>1</sup> )                             | ( <sup>1</sup> )                                     | 97                               | + 3                                          | —14                                                  | 96                                  | + 4                                          | —14                                                  |
| 1915.....                          | 100                                | —                                            | ( <sup>1</sup> )                                     | 100                              | —                                            | + 3                                                  | 100                                 | —                                            | + 4                                                  |

<sup>1</sup> No change.

The relative full-time weekly earnings for all occupations of the department combined in 1907 were 96 as compared with 100 in 1915. In other words, the full-time weekly earnings in 1907 were 96 per cent of those in 1915. The relative dropped to 88 in 1908, advanced to 93 in 1909, and to 98 in 1910, dropped in 1911 to 93, advanced in 1912 to 100, and in 1913 to 111, and dropped to 96 in 1914. In 1915, the base year, the relative was 100. These relative numbers for each year previous to 1914 are based on the principal productive occupations only, but those for 1914 and 1915 include also the unclassified groups tabulated for 1914 and 1915 for the first time.

The next column shows that full-time weekly earnings in 1915 were 4 per cent higher than in 1907, 14 per cent higher than in 1908, 8 per cent higher than in 1909, 2 per cent higher than in 1910, 8 per cent higher than in 1911, the same as in 1912, 10 per cent lower than in 1913, and 4 per cent higher than in 1914.

#### FULL-TIME WORKING DAYS PER WEEK.

The number and per cent of employees in the principal productive occupations in Bessemer converting plants whose customary working time per week was 6 days or turns, or 7 days, or variations thereof, are shown in Table 18. The figures are presented for each of the two districts for which these plants are reported and for the two combined. The employees given under the headings "5 days, 6 days, and 7 days in rotation," "6 days, 6 days, and 7 days in rotation," and "6 days, 7 days, and 7 days in rotation" are engaged in occupations for which the plant employs three shifts instead of the customary two to complete the 24 hours of a day. The heading "6 days, 6 days, and 7 days in rotation," for example, indicates that each week one-third of the employees reported work 7 turns instead of the customary 6, the plant being shut down during the time of two shifts on one day each week.

Two sets of figures are shown for the plants reported for 1914 and 1915, the first covering only the principal productive occupations as shown for all the preceding groups and therefore strictly comparable with them, and the second including the unclassified occupations (see pp. 55 to 56) tabulated for 1914 and 1915 for the first time.

TABLE 18.—NUMBER AND PER CENT OF EMPLOYEES IN EACH DISTRICT WORKING EACH SPECIFIED NUMBER OF DAYS PER WEEK, BY YEARS, 1907 TO 1915—*BESSEMER CONVERTERS.*

[The figures for each group of years are for identical plants.]

| District, and number of plants. | Year. | Number of employees. | Number of employees whose customary working time per week was— |                                |                                         |                                         |                                         | Per cent of employees whose customary working time per week was— |         |                                |                                         |                                         |                                         |         |
|---------------------------------|-------|----------------------|----------------------------------------------------------------|--------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|------------------------------------------------------------------|---------|--------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|---------|
|                                 |       |                      | 6 days.                                                        | 6 days and 7 days alternately. | 5 days, 6 days, and 7 days in rotation. | 6 days, 6 days, and 7 days in rotation. | 6 days, 7 days, and 7 days in rotation. | 7 days.                                                          | 6 days. | 6 days and 7 days alternately. | 5 days, 6 days, and 7 days in rotation. | 6 days, 6 days, and 7 days in rotation. | 6 days, 7 days, and 7 days in rotation. | 7 days. |
| Pittsburgh: 6 plants...         | 1907  | 1,325                | 999                                                            | 53                             | .....                                   | .....                                   | .....                                   | 273                                                              | 75      | 4                              | .....                                   | .....                                   | .....                                   | 21      |
|                                 | 1908  | 896                  | 727                                                            | 42                             | .....                                   | .....                                   | .....                                   | 127                                                              | 81      | 5                              | .....                                   | .....                                   | .....                                   | 14      |
|                                 | 1909  | 992                  | 778                                                            | 44                             | .....                                   | .....                                   | .....                                   | 170                                                              | 78      | 4                              | .....                                   | .....                                   | .....                                   | 17      |
|                                 | 1910  | 1,246                | 825                                                            | 18                             | 78                                      | .....                                   | .....                                   | 325                                                              | 66      | 1                              | 6                                       | .....                                   | .....                                   | 26      |
| 6 plants...                     | 1910  | 1,248                | 827                                                            | 18                             | 78                                      | .....                                   | .....                                   | 325                                                              | 66      | 1                              | 6                                       | .....                                   | .....                                   | 26      |
|                                 | 1911  | 950                  | 765                                                            | 36                             | .....                                   | 3                                       | .....                                   | 146                                                              | 81      | 4                              | .....                                   | (1)                                     | .....                                   | 15      |
|                                 | 1912  | 1,019                | 824                                                            | 44                             | .....                                   | 3                                       | .....                                   | 148                                                              | 81      | 4                              | .....                                   | (1)                                     | .....                                   | 15      |
| 6 plants...                     | 1912  | 1,037                | 803                                                            | 54                             | .....                                   | 12                                      | 9                                       | 159                                                              | 77      | 5                              | .....                                   | 1                                       | 1                                       | 15      |
|                                 | 1913  | 1,176                | 890                                                            | 52                             | .....                                   | 69                                      | 12                                      | 153                                                              | 76      | 4                              | .....                                   | 6                                       | 1                                       | 13      |
| 6 plants...                     | 1913  | 996                  | 761                                                            | 50                             | .....                                   | *53                                     | .....                                   | 132                                                              | 76      | 5                              | .....                                   | 5                                       | .....                                   | 13      |
|                                 | 1914  | 825                  | 594                                                            | 33                             | .....                                   | *50                                     | .....                                   | 148                                                              | 72      | 4                              | .....                                   | 6                                       | .....                                   | 18      |
| 7 plants...                     | 1914  | 914                  | *674                                                           | 29                             | .....                                   | 57                                      | 6                                       | 148                                                              | 74      | 3                              | .....                                   | 6                                       | 1                                       | 16      |
|                                 | 1915  | 889                  | *6.8                                                           | 21                             | .....                                   | 51                                      | 6                                       | 153                                                              | 73      | 2                              | .....                                   | 6                                       | 1                                       | 18      |
| 7 plants...                     | 1914  | 1,500                | 1,061                                                          | 75                             | .....                                   | *67                                     | 6                                       | 291                                                              | 71      | 5                              | .....                                   | 4                                       | (1)                                     | 19      |
|                                 | 1915  | 1,463                | 1,044                                                          | 65                             | .....                                   | *61                                     | 6                                       | 287                                                              | 71      | 4                              | .....                                   | 4                                       | (1)                                     | 20      |
| Great Lakes and Middle West:    |       |                      |                                                                |                                |                                         |                                         |                                         |                                                                  |         |                                |                                         |                                         |                                         |         |
| 3 plants...                     | 1907  | 432                  | 74                                                             | 177                            | .....                                   | 18                                      | 12                                      | 151                                                              | 17      | 41                             | .....                                   | 4                                       | 3                                       | 35      |
|                                 | 1908  | 2 8                  | 88                                                             | 71                             | .....                                   | 18                                      | 12                                      | 94                                                               | 31      | 25                             | .....                                   | 6                                       | 4                                       | 33      |
|                                 | 1909  | 360                  | 63                                                             | 142                            | .....                                   | 18                                      | 12                                      | 125                                                              | 18      | 39                             | .....                                   | 5                                       | 3                                       | 35      |
|                                 | 1910  | 403                  | 98                                                             | 44                             | .....                                   | 18                                      | 12                                      | 231                                                              | 24      | 11                             | .....                                   | 5                                       | 3                                       | 57      |
| 4 plants...                     | 1910  | 482                  | 173                                                            | 48                             | .....                                   | 18                                      | 12                                      | 231                                                              | 36      | 10                             | .....                                   | 4                                       | 3                                       | 48      |
|                                 | 1911  | 392                  | 267                                                            | 44                             | .....                                   | 18                                      | 12                                      | 51                                                               | 68      | 11                             | .....                                   | 5                                       | 3                                       | 13      |
| 4 plants...                     | 1911  | 400                  | 275                                                            | 44                             | .....                                   | 18                                      | 12                                      | 51                                                               | 69      | 11                             | .....                                   | 5                                       | 3                                       | 13      |
|                                 | 1912  | 441                  | 183                                                            | 158                            | .....                                   | 18                                      | 12                                      | 70                                                               | 42      | 36                             | .....                                   | 4                                       | 3                                       | 16      |
| 4 plants...                     | 1912  | 457                  | 225                                                            | 136                            | .....                                   | *20                                     | .....                                   | 76                                                               | 49      | 30                             | .....                                   | 4                                       | .....                                   | 17      |
|                                 | 1913  | 485                  | 325                                                            | 114                            | .....                                   | *20                                     | .....                                   | 26                                                               | 67      | 24                             | .....                                   | 4                                       | .....                                   | 5       |
| 4 plants...                     | 1913  | 343                  | 243                                                            | 66                             | .....                                   | 12                                      | .....                                   | 22                                                               | 71      | 19                             | .....                                   | 3                                       | .....                                   | 6       |
|                                 | 1914  | 242                  | 240                                                            | 2                              | .....                                   | .....                                   | .....                                   | .....                                                            | 99      | 1                              | .....                                   | .....                                   | .....                                   | .....   |
| 5 plants...                     | 1914  | 345                  | 343                                                            | 2                              | .....                                   | .....                                   | .....                                   | .....                                                            | 99      | 1                              | .....                                   | .....                                   | .....                                   | .....   |
|                                 | 1915  | 318                  | 316                                                            | 2                              | .....                                   | .....                                   | .....                                   | .....                                                            | 99      | 1                              | .....                                   | .....                                   | .....                                   | .....   |
| 5 plants...                     | 1914  | 767                  | 757                                                            | 4                              | .....                                   | .....                                   | .....                                   | 6                                                                | 99      | 1                              | .....                                   | .....                                   | .....                                   | 1       |
|                                 | 1915  | 755                  | 740                                                            | 2                              | .....                                   | .....                                   | .....                                   | 13                                                               | 98      | (1)                            | .....                                   | .....                                   | .....                                   | 2       |
| Total:                          |       |                      |                                                                |                                |                                         |                                         |                                         |                                                                  |         |                                |                                         |                                         |                                         |         |
| 9 plants...                     | 1907  | 1,757                | 1,073                                                          | 230                            | .....                                   | 18                                      | 12                                      | 424                                                              | 61      | 13                             | .....                                   | 1                                       | 1                                       | 24      |
|                                 | 1908  | 1,179                | 815                                                            | 113                            | .....                                   | 18                                      | 12                                      | 221                                                              | 69      | 10                             | .....                                   | 2                                       | 1                                       | 19      |
|                                 | 1909  | 1,352                | 841                                                            | 186                            | .....                                   | 18                                      | 12                                      | 295                                                              | 62      | 14                             | .....                                   | 1                                       | 1                                       | 22      |
|                                 | 1910  | 1,649                | 923                                                            | 62                             | 78                                      | 18                                      | 12                                      | 556                                                              | 56      | 4                              | 5                                       | 1                                       | 1                                       | 34      |
| 10 plants...                    | 1910  | 1,730                | 1,000                                                          | 66                             | 78                                      | 18                                      | 12                                      | 556                                                              | 58      | 4                              | 5                                       | 1                                       | 1                                       | 32      |
|                                 | 1911  | 1,342                | 1,032                                                          | 80                             | .....                                   | 21                                      | 12                                      | 197                                                              | 77      | 6                              | .....                                   | 2                                       | 1                                       | 15      |
| 10 plants...                    | 1911  | 1,350                | 1,040                                                          | 80                             | .....                                   | 21                                      | 12                                      | 197                                                              | 77      | 6                              | .....                                   | 2                                       | 1                                       | 15      |
|                                 | 1912  | 1,460                | 1,007                                                          | 202                            | .....                                   | 21                                      | 12                                      | 218                                                              | 69      | 14                             | .....                                   | 1                                       | 1                                       | 15      |
| 10 plants...                    | 1912  | 1,494                | 1,028                                                          | 190                            | .....                                   | *32                                     | 9                                       | 235                                                              | 69      | 13                             | .....                                   | 2                                       | 1                                       | 16      |
|                                 | 1913  | 1,661                | 1,215                                                          | 166                            | .....                                   | *89                                     | 12                                      | 179                                                              | 73      | 10                             | .....                                   | 5                                       | 1                                       | 11      |
| 10 plants...                    | 1913  | 1,339                | 1,004                                                          | 116                            | .....                                   | *65                                     | .....                                   | 154                                                              | 75      | 9                              | .....                                   | 5                                       | .....                                   | 12      |
|                                 | 1914  | 1,069                | 834                                                            | 35                             | .....                                   | *50                                     | .....                                   | 148                                                              | 78      | 3                              | .....                                   | 5                                       | .....                                   | 14      |
| 12 plants...                    | 1914  | 1,259                | *1,017                                                         | 31                             | .....                                   | 57                                      | 6                                       | 148                                                              | 81      | 2                              | .....                                   | 5                                       | (1)                                     | 12      |
|                                 | 1915  | 1,187                | *954                                                           | 23                             | .....                                   | 51                                      | 6                                       | 153                                                              | 80      | 2                              | .....                                   | 4                                       | 1                                       | 13      |
| 12 plants...                    | 1914  | 2,267                | 1,818                                                          | 79                             | .....                                   | *67                                     | 6                                       | 297                                                              | 80      | 3                              | .....                                   | 3                                       | (1)                                     | 13      |
|                                 | 1915  | 2,218                | 1,784                                                          | 67                             | .....                                   | *61                                     | 6                                       | 300                                                              | 80      | 3                              | .....                                   | 3                                       | (1)                                     | 14      |

<sup>1</sup> Less than one-half of 1 per cent.

<sup>2</sup> Including 2 employees who worked 7 days every fourth week.

<sup>3</sup> Including 4 employees who worked 7 days every fourth week.

<sup>4</sup> Including 8 employees who worked 7 days every fourth week.

Two general tables are presented for the Bessemer converting department, as follows:

**Table C.**—Full-time hours per week, rates of wages per hour, and full-time weekly earnings, in the United States, by years, 1907 to 1915.

**Table D.**—Full-time hours per week, rates of wages per hour, and full-time weekly earnings, in each district, by years, 1913 to 1915.

The data from Table C are summarized in Table 16, percentages being used instead of the actual figures for classified hours and rates of wages.

The order in which the occupations are given in Tables C and D, and in the table of relative numbers, follows that of the processes of manufacture. "Identical plants," as used in the tables of this report, are identical units of identical establishments, reporting the same occupations in each of two or more consecutive years. For a more extended explanation, see page 58.

Figures for each geographical division for each preceding year, back to 1907, corresponding to those given for 1913, 1914, and 1915 in Table D, were given in Bulletins 151 and 168 of this bureau.

Descriptions of the specified occupations which appear in the tables of this chapter and of others included in the two groups designated as "Unclassified—productive" and "Unclassified—nonproductive," are to be found in the Glossary of Occupations on pages 475 to 481.





TABLE C.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER BY YEARS, 1907 TO 1915—

(The figures for each group of

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |       |                      |       |                      |       |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-------|----------------------|-------|----------------------|-------|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60    | Over 60 and under 72 | 72    | Over 72 and under 84 | 84    |
| 1        | Stockers:                         | 1907  | 371                  | 62.5                              | \$0.246                         | \$14.27                            | 171                                            | .....                | 18              | ..... | 28                   | 27    | 83                   | 44    |
| 2        | 9 plants.....                     | 1908  | 260                  | 58.3                              | .275                            | 14.93                              | 150                                            | 4                    | 24              | ..... | 27                   | 27    | 25                   | 30    |
| 3        |                                   | 1909  | 266                  | 63.6                              | .264                            | 15.31                              | 114                                            | .....                | 16              | ..... | 4                    | 33    | 60                   | 39    |
| 4        |                                   | 1910  | 350                  | 64.9                              | .266                            | 16.04                              | 114                                            | 31                   | .....           | 25    | .....                | 68    | 20                   | 92    |
| 5        | 10 plants.....                    | 1910  | 352                  | 64.9                              | .266                            | 16.03                              | 114                                            | 31                   | .....           | 27    | .....                | 68    | 20                   | 92    |
| 6        |                                   | 1911  | 241                  | 61.7                              | .233                            | 13.60                              | 111                                            | .....                | 15              | 2     | .....                | 57    | 26                   | 30    |
| 7        |                                   | 1912  | 268                  | 62.0                              | .312                            | 17.66                              | 123                                            | .....                | 20              | 2     | 18                   | 21    | 48                   | 36    |
| 8        | 10 plants.....                    | 1912  | 280                  | 62.1                              | .306                            | 17.38                              | 125                                            | 6                    | 20              | 2     | 18                   | 23    | 42                   | 44    |
| 9        |                                   | 1913  | 337                  | 62.5                              | .331                            | 19.05                              | 77                                             | 72                   | .....           | 2     | 29                   | 92    | 45                   | 20    |
| 10       | 5 plants.....                     | 1913  | 194                  | 58.1                              | .405                            | 22.07                              | 44                                             | 72                   | .....           | 2     | 29                   | 22    | 19                   | 6     |
| 11       |                                   | 1914  | 162                  | 57.1                              | .349                            | 18.91                              | 90                                             | 6                    | 2               | 2     | 30                   | 20    | 12                   | ..... |
| 12       | 6 plants.....                     | 1914  | 167                  | 55.5                              | .351                            | 18.59                              | 105                                            | 6                    | 4               | 2     | 2                    | 36    | 12                   | ..... |
| 13       |                                   | 1915  | 157                  | 55.6                              | .313                            | 16.70                              | 96                                             | 6                    | 2               | 7     | 2                    | 32    | 12                   | ..... |
| 14       | Cupola melters:                   | 1907  | 15                   | 65.2                              | .509                            | 31.67                              | 6                                              | .....                | .....           | ..... | 2                    | 3     | 2                    | 12    |
| 15       | 7 plants.....                     | 1908  | 15                   | 64.7                              | .350                            | 22.20                              | 6                                              | .....                | .....           | ..... | 2                    | 3     | 2                    | 2     |
| 16       |                                   | 1909  | 15                   | 64.7                              | .419                            | 26.09                              | 6                                              | .....                | .....           | ..... | 2                    | 3     | 2                    | 2     |
| 17       |                                   | 1910  | 16                   | 60.6                              | .447                            | 25.85                              | 6                                              | 3                    | .....           | ..... | .....                | 3     | 2                    | 2     |
| 18       |                                   | 1911  | 15                   | 64.3                              | .390                            | 24.45                              | 6                                              | .....                | .....           | ..... | 2                    | 3     | 2                    | 2     |
| 19       | 8 plants.....                     | 1911  | 17                   | 65.2                              | .386                            | 24.62                              | 6                                              | .....                | .....           | ..... | 2                    | 5     | 2                    | 2     |
| 20       |                                   | 1912  | 18                   | 61.6                              | .409                            | 23.82                              | 9                                              | .....                | .....           | ..... | 2                    | 3     | 2                    | 2     |
| 21       |                                   | 1913  | 19                   | 62.4                              | .477                            | 28.23                              | 6                                              | 3                    | .....           | ..... | 2                    | 4     | 2                    | 2     |
| 22       | 5 plants.....                     | 1913  | 14                   | 62.7                              | .507                            | 30.89                              | 3                                              | 3                    | .....           | ..... | 6                    | ..... | 2                    | ..... |
| 23       |                                   | 1914  | 14                   | 63.0                              | .346                            | 21.40                              | 3                                              | 3                    | .....           | ..... | 2                    | 4     | 2                    | ..... |
| 24       | 6 plants.....                     | 1914  | 15                   | 59.5                              | .390                            | 23.00                              | 3                                              | 6                    | .....           | ..... | 2                    | 2     | 2                    | ..... |
| 25       |                                   | 1915  | 15                   | 59.3                              | .449                            | 25.90                              | 3                                              | 0                    | .....           | ..... | .....                | 4     | 2                    | ..... |
| 26       | Cupola tappers:                   | 1907  | 50                   | 60.5                              | .379                            | 22.16                              | 27                                             | .....                | .....           | ..... | 4                    | 9     | 6                    | 4     |
| 27       | 8 plants.....                     | 1908  | 43                   | 59.3                              | .335                            | 19.67                              | 24                                             | .....                | .....           | ..... | 2                    | 13    | 2                    | 2     |
| 28       |                                   | 1909  | 43                   | 61.5                              | .340                            | 19.74                              | 24                                             | .....                | .....           | ..... | .....                | 5     | 8                    | 6     |
| 29       |                                   | 1910  | 56                   | 58.9                              | .362                            | 20.30                              | 36                                             | .....                | .....           | ..... | .....                | 7     | 8                    | 5     |
| 30       |                                   | 1911  | 41                   | 59.3                              | .318                            | 18.19                              | 24                                             | .....                | .....           | ..... | .....                | 11    | 2                    | 4     |
| 31       | 9 plants.....                     | 1911  | 45                   | 60.4                              | .314                            | 18.36                              | 24                                             | .....                | .....           | ..... | .....                | 15    | 2                    | 4     |
| 32       |                                   | 1912  | 48                   | 60.6                              | .369                            | 20.94                              | 27                                             | .....                | .....           | ..... | 2                    | 5     | 10                   | 4     |
| 33       |                                   | 1913  | 69                   | 59.5                              | .393                            | 22.25                              | 21                                             | 18                   | .....           | ..... | 4                    | 16    | 10                   | ..... |
| 34       | 2 plants.....                     | 1913  | 22                   | 54.3                              | .461                            | 24.06                              | .....                                          | 18                   | .....           | ..... | .....                | 4     | .....                | ..... |
| 35       |                                   | 1914  | 22                   | 54.3                              | .276                            | 15.18                              | .....                                          | 18                   | .....           | ..... | .....                | 4     | .....                | ..... |
| 36       | 4 plants.....                     | 1914  | 34                   | 56.9                              | .286                            | 16.47                              | .....                                          | 24                   | .....           | ..... | .....                | 10    | .....                | ..... |
| 37       |                                   | 1915  | 24                   | 55.8                              | .332                            | 18.43                              | .....                                          | 18                   | .....           | ..... | .....                | 6     | .....                | ..... |
| 38       | Blowers:                          | 1907  | 20                   | 65.4                              | .619                            | 39.55                              | 6                                              | .....                | .....           | ..... | 2                    | 10    | 2                    | ..... |
| 39       | 9 plants.....                     | 1908  | 19                   | 68.8                              | .466                            | 32.41                              | 3                                              | .....                | .....           | ..... | 2                    | 12    | 2                    | ..... |
| 40       |                                   | 1909  | 19                   | 68.8                              | .486                            | 33.29                              | 3                                              | .....                | .....           | ..... | 2                    | 12    | 2                    | ..... |
| 41       |                                   | 1910  | 20                   | 69.8                              | .536                            | 37.00                              | 3                                              | .....                | .....           | ..... | .....                | 12    | 3                    | 2     |
| 42       |                                   | 1911  | 18                   | 71.9                              | .498                            | 35.84                              | .....                                          | .....                | .....           | ..... | 2                    | 16    | .....                | ..... |
| 43       | 10 plants.....                    | 1911  | 20                   | 72.0                              | .493                            | 35.48                              | .....                                          | .....                | .....           | ..... | 2                    | 18    | .....                | ..... |
| 44       |                                   | 1912  | 21                   | 69.1                              | .529                            | 36.36                              | 3                                              | .....                | .....           | ..... | 2                    | 14    | 2                    | ..... |
| 45       |                                   | 1913  | 23                   | 63.2                              | .600                            | 37.33                              | 6                                              | 3                    | .....           | ..... | 2                    | 10    | 2                    | ..... |
| 46       | 10 plants.....                    | 1913  | 23                   | 63.3                              | .598                            | 37.33                              | 6                                              | 3                    | .....           | ..... | 2                    | 8     | 4                    | ..... |
| 47       |                                   | 1914  | 22                   | 65.6                              | .543                            | 35.25                              | 3                                              | 3                    | .....           | ..... | 2                    | 12    | 2                    | ..... |
| 48       | 12 plants.....                    | 1914  | 27                   | 64.1                              | .545                            | 34.43                              | 6                                              | 3                    | .....           | ..... | 2                    | 14    | 2                    | ..... |
| 49       |                                   | 1915  | 27                   | 64.0                              | .561                            | 35.61                              | 6                                              | 3                    | .....           | ..... | 2                    | 14    | 2                    | ..... |

<sup>1</sup> Including 1 employee whose full-time hours per week were 91.

HOURLY AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES,  
BESSEMER CONVERTERS.

years are for identical plants.]

| Employees whose rates of wages per hour were— |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                         | Line<br>No. |
|-----------------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|-------------------------|-------------|
| 9 and<br>under<br>10<br>cents.                | 10<br>and<br>under<br>12<br>cents. | 12<br>and<br>under<br>14<br>cents. | 14<br>and<br>under<br>16<br>cents. | 16<br>and<br>under<br>18<br>cents. | 18<br>and<br>under<br>20<br>cents. | 20<br>and<br>under<br>25<br>cents. | 25<br>and<br>under<br>30<br>cents. | 30<br>and<br>under<br>40<br>cents. | 40<br>and<br>under<br>50<br>cents. | 50<br>and<br>under<br>60<br>cents. | 60<br>and<br>under<br>70<br>cents. | 70cents<br>and<br>over. |             |
|                                               |                                    |                                    | 63                                 | 97                                 | 6                                  | 46                                 | 54                                 | 81                                 | 24                                 |                                    |                                    |                         | 1           |
|                                               | 16                                 |                                    | 21                                 | 55                                 | 20                                 | 20                                 | 48                                 | 60                                 | 16                                 | 24                                 |                                    |                         | 2           |
|                                               |                                    | 22                                 | 49                                 | 37                                 | 15                                 | 19                                 | 12                                 | 54                                 | 49                                 | 9                                  |                                    |                         | 3           |
|                                               |                                    |                                    | 10                                 | 115                                | 16                                 | 32                                 | 57                                 | 69                                 | 51                                 |                                    |                                    |                         | 4           |
|                                               |                                    |                                    | 10                                 | 115                                | 16                                 | 34                                 | 57                                 | 69                                 | 51                                 |                                    |                                    |                         | 5           |
|                                               |                                    |                                    | 12                                 | 81                                 | 15                                 | 58                                 | 39                                 | 24                                 | 12                                 |                                    |                                    |                         | 6           |
|                                               |                                    |                                    |                                    | 80                                 | 21                                 | 23                                 | 13                                 | 55                                 | 40                                 | 36                                 |                                    |                         | 7           |
|                                               |                                    |                                    |                                    | 86                                 | 29                                 | 21                                 | 13                                 | 55                                 | 40                                 | 36                                 |                                    |                         | 8           |
|                                               |                                    |                                    |                                    | 4                                  | 83                                 | 69                                 | 23                                 | 36                                 | 74                                 | 36                                 | 12                                 |                         | 9           |
|                                               |                                    |                                    |                                    |                                    | 9                                  | 37                                 | 20                                 | 18                                 | 62                                 | 36                                 | 12                                 |                         | 10          |
|                                               |                                    |                                    |                                    | 1                                  | 17                                 | 28                                 | 36                                 | 6                                  | 62                                 | 12                                 |                                    |                         | 11          |
|                                               |                                    |                                    |                                    | 1                                  | 9                                  | 36                                 | 41                                 | 6                                  | 62                                 | 12                                 |                                    |                         | 12          |
|                                               |                                    |                                    |                                    | 3                                  | 4                                  | 49                                 | 23                                 | 45                                 | 30                                 | 3                                  |                                    |                         | 13          |
|                                               |                                    |                                    |                                    |                                    |                                    | 1                                  | 1                                  | 3                                  |                                    | 5                                  | 2                                  | 3                       | 14          |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  | 3                                  | 5                                  | 3                                  | 2                                  |                                    |                         | 15          |
|                                               |                                    |                                    |                                    |                                    |                                    | 3                                  |                                    | 2                                  | 5                                  | 5                                  |                                    |                         | 16          |
|                                               |                                    |                                    |                                    |                                    |                                    | 1                                  | 2                                  | 5                                  |                                    | 5                                  | 3                                  |                         | 17          |
|                                               |                                    |                                    |                                    |                                    |                                    | 1                                  | 2                                  | 4                                  | 6                                  | 2                                  |                                    |                         | 18          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                         |             |
|                                               |                                    |                                    |                                    |                                    |                                    | 1                                  | 2                                  | 6                                  | 6                                  | 2                                  |                                    |                         | 19          |
|                                               |                                    |                                    |                                    |                                    |                                    | 1                                  | 2                                  | 6                                  | 4                                  | 5                                  |                                    |                         | 20          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 2                                  | 2                                  | 8                                  | 3                                  |                         | 21          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 2                                  | 5                                  | 3                                  |                         | 22          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 7                                  | 3                                  |                                    |                                    |                         | 23          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 9                                  | 6                                  |                                    |                         | 24          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 7                                  | 2                                  | 6                                  |                                    |                         | 25          |
|                                               |                                    |                                    |                                    | 1                                  |                                    |                                    | 6                                  | 17                                 | 26                                 |                                    |                                    |                         | 26          |
|                                               |                                    |                                    |                                    | 1                                  |                                    | 2                                  | 8                                  | 27                                 | 5                                  |                                    |                                    |                         | 27          |
|                                               |                                    |                                    |                                    | 1                                  |                                    | 7                                  | 13                                 | 3                                  | 19                                 |                                    |                                    |                         | 28          |
|                                               |                                    |                                    |                                    |                                    | 1                                  | 2                                  | 17                                 | 18                                 | 15                                 | 3                                  |                                    |                         | 29          |
|                                               |                                    |                                    |                                    |                                    | 2                                  | 2                                  | 12                                 | 26                                 |                                    |                                    |                                    |                         | 30          |
|                                               |                                    |                                    |                                    |                                    | 1                                  | 2                                  | 16                                 | 26                                 |                                    |                                    |                                    |                         | 31          |
|                                               |                                    |                                    |                                    |                                    | 1                                  | 2                                  | 18                                 | 1                                  | 26                                 |                                    |                                    |                         | 32          |
|                                               |                                    |                                    |                                    |                                    | 2                                  | 2                                  | 20                                 | 8                                  | 27                                 | 12                                 |                                    |                         | 33          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                         |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 18                                 | 4                                  | 18                                 |                                    |                                    |                         | 34          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  |                                    |                                    |                                    |                         | 35          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                         |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 18                                 | 16                                 |                                    |                                    |                                    |                         | 36          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 23                                 |                                    |                                    |                                    |                         | 37          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 4                                  |                                    | 3                       | 9           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 7                                  | 8                                  | 2                                  |                                    |                         | 38          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 9                                  | 4                                  |                                    |                         | 39          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 9                                  | 3                                  |                         | 40          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 10                                 |                                    |                         | 41          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                         | 42          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 12                                 | 4                                  |                                    |                         | 43          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 12                                 | 5                                  | 2                                  |                         | 44          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 8                                  | 5                                  | 5                                  |                         | 45          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 5                                  |                                    |                         |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 8                                  | 5                                  | 5                                  |                         | 46          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 11                                 | 6                                  | 3                                  |                         | 47          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 13                                 | 7                                  | 5                                  |                         | 48          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 11                                 | 8                                  | 6                                  | 2                       | 49          |

TABLE C.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER BY YEARS, 1907 TO 1915—

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Regulators, first:                | 1907  | 26                   | 62.3                              | \$0.437                         | \$27.28                            | 12                                             |                      |                 |    | 2                    | 8  | 2                    | 2  |
| 2        | 9 plants.....                     | 1908  | 25                   | 64.7                              | .266                            | 17.78                              | 9                                              |                      |                 |    | 4                    | 8  | 2                    | 2  |
| 3        |                                   | 1909  | 25                   | 64.8                              | .344                            | 22.97                              | 9                                              |                      |                 |    | 2                    | 10 | 2                    | 2  |
| 4        |                                   | 1910  | 29                   | 61.4                              | .414                            | 25.60                              | 6                                              | 9                    |                 |    |                      | 10 |                      | 4  |
| 5        | 10 plants.....                    | 1910  | 31                   | 62.1                              | .408                            | 25.45                              | 6                                              | 9                    |                 |    |                      | 12 |                      | 4  |
| 6        |                                   | 1911  | 24                   | 66.8                              | .377                            | 24.79                              | 6                                              |                      |                 |    | 4                    | 12 |                      | 2  |
| 7        |                                   | 1912  | 25                   | 64.7                              | .411                            | 26.24                              | 9                                              |                      |                 |    | 4                    | 8  | 2                    | 2  |
| 8        | 10 plants.....                    | 1912  | 24                   | 68.5                              | .399                            | 27.16                              | 6                                              |                      |                 |    | 2                    | 6  | 8                    | 2  |
| 9        |                                   | 1913  | 24                   | 67.6                              | .451                            | 30.28                              | 6                                              |                      |                 |    | 2                    | 8  | 8                    |    |
| 10       | 9 plants.....                     | 1913  | 20                   | 66.4                              | .484                            | 32.23                              | 6                                              |                      |                 |    | 2                    | 4  | 8                    |    |
| 11       |                                   | 1914  | 18                   | 69.0                              | .324                            | 22.20                              | 3                                              |                      |                 |    | 4                    | 5  | 6                    |    |
| 12       | 11 plants.....                    | 1914  | 24                   | 63.8                              | .328                            | 20.71                              | 9                                              |                      |                 |    | 4                    | 5  | 6                    |    |
| 13       |                                   | 1915  | 26                   | 64.7                              | .351                            | 22.91                              | 9                                              |                      |                 |    |                      | 9  | 8                    |    |
| 14       | Regulators, second:               | 1907  | 18                   | 65.3                              | .427                            | 27.81                              | 6                                              |                      |                 |    | 2                    | 6  | 4                    |    |
| 15       | 6 plants.....                     | 1908  | 14                   | 73.5                              | .269                            | 19.64                              |                                                |                      |                 |    | 4                    | 6  | 4                    |    |
| 16       |                                   | 1909  | 14                   | 73.8                              | .365                            | 26.80                              |                                                |                      |                 |    | 2                    | 8  | 4                    |    |
| 17       |                                   | 1910  | 18                   | 66.7                              | .403                            | 26.96                              | 6                                              |                      |                 |    |                      | 8  |                      | 4  |
| 18       | 8 plants.....                     | 1910  | 22                   | 67.5                              | .378                            | 25.52                              | 6                                              |                      |                 |    | 2                    | 10 |                      | 4  |
| 19       |                                   | 1911  | 21                   | 65.0                              | .333                            | 21.41                              | 6                                              |                      |                 |    | 4                    | 11 |                      |    |
| 20       |                                   | 1912  | 23                   | 63.5                              | .367                            | 23.36                              | 9                                              |                      |                 |    | 4                    | 6  | 4                    |    |
| 21       | 9 plants.....                     | 1912  | 24                   | 67.0                              | .381                            | 25.63                              | 6                                              |                      |                 |    | 4                    | 8  | 6                    |    |
| 22       |                                   | 1913  | 24                   | 67.0                              | .411                            | 27.56                              | 6                                              |                      |                 |    | 4                    | 8  | 6                    |    |
| 23       | 10 plants.....                    | 1913  | 28                   | 68.3                              | .394                            | 26.81                              | 6                                              |                      |                 |    | 4                    | 8  | 10                   |    |
| 24       |                                   | 1914  | 22                   | 69.0                              | .281                            | 19.22                              | 3                                              |                      |                 |    | 4                    | 7  | 8                    |    |
| 25       | 11 plants.....                    | 1914  | 25                   | 66.5                              | .289                            | 18.90                              | 6                                              |                      |                 |    | 4                    | 7  | 8                    |    |
| 26       |                                   | 1915  | 26                   | 66.6                              | .324                            | 21.64                              | 6                                              |                      |                 |    | 2                    | 12 | 6                    |    |
| 27       | Vessel men:                       | 1907  | 23                   | 58.5                              | .793                            | 44.58                              | 12                                             | 3                    |                 |    |                      | 2  | 4                    | 2  |
| 28       | 9 plants.....                     | 1908  | 22                   | 61.1                              | .528                            | 31.27                              | 9                                              | 3                    |                 |    |                      | 4  | 4                    | 2  |
| 29       |                                   | 1909  | 22                   | 61.2                              | .630                            | 37.19                              | 9                                              | 3                    |                 |    |                      | 4  | 4                    | 2  |
| 30       |                                   | 1910  | 24                   | 56.6                              | .708                            | 38.88                              | 12                                             | 6                    |                 |    |                      | 2  |                      | 4  |
| 31       | 10 plants.....                    | 1910  | 26                   | 57.8                              | .685                            | 38.18                              | 12                                             | 6                    |                 |    |                      | 4  |                      | 4  |
| 32       |                                   | 1911  | 25                   | 59.1                              | .580                            | 32.45                              | 12                                             | 3                    |                 |    |                      | 6  | 2                    | 2  |
| 33       |                                   | 1912  | 26                   | 57.3                              | .703                            | 38.32                              | 15                                             | 3                    |                 |    |                      | 2  | 4                    | 2  |
| 34       | 10 plants.....                    | 1912  | 26                   | 58.3                              | .688                            | 38.60                              | 9                                              | 9                    |                 |    |                      | 2  | 4                    | 2  |
| 35       |                                   | 1913  | 26                   | 57.4                              | .744                            | 41.09                              | 9                                              | 9                    |                 |    |                      | 4  | 4                    |    |
| 36       | 10 plants.....                    | 1913  | 26                   | 57.8                              | .744                            | 41.52                              | 6                                              | 12                   |                 |    |                      | 4  | 4                    |    |
| 37       |                                   | 1914  | 25                   | 56.4                              | .492                            | 27.71                              | 6                                              | 12                   |                 |    |                      | 5  | 2                    |    |
| 38       | 12 plants.....                    | 1914  | 31                   | 55.6                              | .499                            | 27.64                              | 9                                              | 12                   | 3               |    |                      | 5  | 2                    |    |
| 39       |                                   | 1915  | 32                   | 56.0                              | .554                            | 30.87                              | 9                                              | 15                   |                 |    |                      | 6  | 2                    |    |
| 40       | Vessel men's helpers:             | 1907  | 47                   | 57.0                              | .566                            | 31.84                              | 24                                             | 9                    |                 |    |                      | 4  | 8                    | 2  |
| 41       | 9 plants.....                     | 1908  | 45                   | 59.5                              | .376                            | 21.65                              | 18                                             | 9                    |                 |    |                      | 8  | 8                    | 2  |
| 42       |                                   | 1909  | 45                   | 59.6                              | .484                            | 28.24                              | 18                                             | 9                    |                 |    |                      | 8  | 8                    | 2  |
| 43       |                                   | 1910  | 49                   | 55.3                              | .524                            | 28.86                              | 24                                             | 15                   |                 |    |                      | 4  |                      | 6  |
| 44       | 10 plants.....                    | 1910  | 53                   | 56.5                              | .506                            | 28.22                              | 24                                             | 15                   |                 |    |                      | 8  |                      | 6  |
| 45       |                                   | 1911  | 51                   | 57.6                              | .421                            | 23.48                              | 24                                             | 9                    |                 |    |                      | 12 | 4                    | 2  |
| 46       |                                   | 1912  | 53                   | 55.9                              | .470                            | 25.47                              | 30                                             | 9                    |                 |    |                      | 4  | 8                    | 2  |
| 47       | 10 plants.....                    | 1912  | 53                   | 56.5                              | .467                            | 25.70                              | 24                                             | 15                   |                 |    |                      | 4  | 8                    | 2  |
| 48       |                                   | 1913  | 53                   | 56.0                              | .528                            | 28.87                              | 24                                             | 15                   |                 |    | 4                    | 6  | 4                    |    |
| 49       | 10 plants.....                    | 1913  | 53                   | 56.4                              | .528                            | 29.15                              | 18                                             | 21                   |                 |    | 4                    | 6  | 4                    |    |
| 50       |                                   | 1914  | 51                   | 54.6                              | .338                            | 18.31                              | 18                                             | 21                   |                 |    | 4                    | 8  |                      |    |
| 51       | 12 plants.....                    | 1914  | 57                   | 54.3                              | .342                            | 18.42                              | 21                                             | 21                   | 3               |    | 4                    | 8  |                      |    |
| 52       |                                   | 1915  | 56                   | 55.5                              | .383                            | 21.18                              | 18                                             | 24                   |                 |    |                      | 14 |                      |    |

HOURLY AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES,  
BESSEMER CONVERTERS—Continued.

| Employees whose rates of wages per hour were— |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | Line<br>No. |
|-----------------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|--------------------------|-------------|
| 9 and<br>under<br>10<br>cents.                | 10<br>and<br>under<br>12<br>cents. | 12<br>and<br>under<br>14<br>cents. | 14<br>and<br>under<br>16<br>cents. | 16<br>and<br>under<br>18<br>cents. | 18<br>and<br>under<br>20<br>cents. | 20<br>and<br>under<br>25<br>cents. | 25<br>and<br>under<br>30<br>cents. | 30<br>and<br>under<br>40<br>cents. | 40<br>and<br>under<br>50<br>cents. | 50<br>and<br>under<br>60<br>cents. | 60<br>and<br>under<br>70<br>cents. | 70 cents<br>and<br>over. |             |
|                                               |                                    |                                    |                                    | 2                                  |                                    |                                    |                                    | 11                                 | 9                                  |                                    | 4                                  |                          | 1           |
|                                               |                                    |                                    |                                    | 2                                  | 9                                  | 3                                  | 5                                  | 2                                  | 4                                  |                                    |                                    |                          | 2           |
|                                               |                                    |                                    |                                    | 2                                  |                                    | 6                                  | 5                                  | 4                                  | 2                                  | 6                                  |                                    |                          | 3           |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    | 11                                 | 10                                 | 4                                  | 2                                  |                          | 4           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          |             |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    | 13                                 | 10                                 | 4                                  | 2                                  |                          | 5           |
|                                               |                                    |                                    | 2                                  |                                    |                                    | 2                                  |                                    | 9                                  | 9                                  | 2                                  |                                    |                          | 6           |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    | 9                                  | 10                                 | 4                                  |                                    |                          | 7           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          |             |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    | 11                                 | 9                                  | 2                                  |                                    |                          | 8           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 6                                  |                                    | 9                                  | 7                                  | 2                                  |                          | 9           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    | 9                                  | 7                                  | 2                                  |                          | 10          |
|                                               |                                    |                                    |                                    |                                    |                                    | 5                                  | 2                                  | 8                                  | 3                                  |                                    |                                    |                          | 11          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          |             |
|                                               |                                    |                                    |                                    |                                    |                                    | 5                                  | 2                                  | 14                                 | 3                                  |                                    |                                    |                          | 12          |
|                                               |                                    |                                    |                                    |                                    |                                    | 3                                  | 4                                  | 10                                 | 7                                  | 2                                  |                                    |                          | 13          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 14                                 | 2                                  |                                    |                          | 14          |
|                                               |                                    |                                    |                                    |                                    | 5                                  | 3                                  | 2                                  | 3                                  | 1                                  |                                    |                                    |                          | 15          |
|                                               |                                    |                                    |                                    |                                    |                                    | 1                                  | 1                                  | 6                                  | 6                                  |                                    |                                    |                          | 16          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 7                                  | 9                                  | 2                                  |                                    |                          | 17          |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  | 2                                  | 7                                  | 9                                  | 2                                  |                                    |                          | 18          |
|                                               |                                    |                                    | 3                                  |                                    |                                    | 1                                  | 1                                  | 9                                  | 7                                  |                                    |                                    |                          | 19          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 6                                  | 13                                 |                                    | 4                                  |                                    |                          | 20          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 6                                  | 10                                 | 6                                  | 2                                  |                                    |                          | 21          |
|                                               |                                    |                                    |                                    |                                    |                                    | 4                                  |                                    | 6                                  | 9                                  | 3                                  | 2                                  |                          | 22          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          |             |
|                                               |                                    |                                    |                                    |                                    |                                    | 4                                  | 4                                  | 6                                  | 9                                  | 3                                  | 2                                  |                          | 23          |
|                                               |                                    |                                    |                                    | 2                                  | 3                                  | 4                                  | 4                                  | 6                                  | 3                                  |                                    |                                    |                          | 24          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          |             |
|                                               |                                    |                                    |                                    | 2                                  | 3                                  | 4                                  | 4                                  | 9                                  | 3                                  |                                    |                                    |                          | 25          |
|                                               |                                    |                                    |                                    |                                    |                                    | 7                                  | 6                                  | 5                                  | 8                                  |                                    |                                    |                          | 26          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    | 2                                  | 5                                  | 14                       | 27          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 9                                  | 2                                  |                                    | 7                                  | 4                        | 28          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 5                                  | 2                                  | 3                                  | 8                        | 29          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 2                                  |                                    | 12                                 | 8                        | 30          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 4                                  |                                    | 12                                 | 8                        | 31          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 4                                  | 2                                  | 4                                  | 6                                  | 7                        | 32          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 5                                  | 4                                  | 3                                  | 12                       | 33          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 5                                  | 4                                  | 3                                  | 12                       | 34          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 2                                  | 8                                  | 12                       | 35          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 6                                  | 4                                  | 13                                 | 2                                  | 12                       | 36          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 37          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 6                                  | 7                                  | 14                                 | 4                        | 38          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 6                                  | 4                                  | 14                                 | 5                        | 39          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 5                                  | 12                                 | 6                                  | 17                                 | 5                        | 40          |
|                                               |                                    |                                    |                                    |                                    | 1                                  | 11                                 | 6                                  | 7                                  | 12                                 | 6                                  | 2                                  |                          | 41          |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  | 4                                  | 6                                  | 17                                 | 8                                  | 5                                  | 3                        | 42          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 6                                  | 25                                 | 2                                  | 8                                  | 6                        | 43          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          |             |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  | 2                                  | 8                                  | 25                                 | 2                                  | 8                                  | 6                        | 44          |
|                                               |                                    |                                    |                                    |                                    | 2                                  | 4                                  | 5                                  | 9                                  | 14                                 | 14                                 | 1                                  | 2                        | 45          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 3                                  | 17                                 | 11                                 | 13                                 | 5                                  | 4                        | 46          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 3                                  | 17                                 | 14                                 | 10                                 | 5                                  | 4                        | 47          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 9                                  | 18                                 | 9                                  | 8                                  | 9                        | 48          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 9                                  | 18                                 | 9                                  | 8                                  | 9                        | 49          |
|                                               |                                    |                                    |                                    |                                    |                                    | 6                                  | 14                                 | 19                                 | 11                                 | 1                                  |                                    |                          | 50          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          |             |
|                                               |                                    |                                    |                                    |                                    |                                    | 6                                  | 14                                 | 23                                 | 13                                 | 1                                  |                                    |                          | 51          |
|                                               |                                    |                                    |                                    | 1                                  | 2                                  | 3                                  | 2                                  | 27                                 | 12                                 | 7                                  | 2                                  |                          | 52          |

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## 130 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

TABLE C.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER  
BY YEARS, 1907 TO 1915—

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Cinder pitmen:                    | 1907  | 118                  | 67.9                              | \$0.206                         | \$13.32                            | 24                                             |                      |                 |    | 44                   | 38 | 4                    | 8  |
| 2        | 8 plants.....                     | 1908  | 71                   | 65.9                              | .173                            | 11.27                              | 21                                             |                      |                 |    | 12                   | 28 | 10                   | 8  |
| 3        |                                   | 1909  | 92                   | 68.4                              | .178                            | 11.88                              | 21                                             |                      |                 |    | 23                   | 30 | 10                   | 8  |
| 4        |                                   | 1910  | 79                   | 67.3                              | .213                            | 13.77                              | 6                                              | 15                   |                 |    |                      | 40 | 10                   | 8  |
| 5        | 9 plants.....                     | 1910  | 85                   | 67.6                              | .211                            | 13.69                              | 6                                              | 15                   |                 |    |                      | 46 | 10                   | 8  |
| 6        |                                   | 1911  | 62                   | 69.8                              | .199                            | 13.55                              | 6                                              |                      |                 |    | 16                   | 34 | 6                    |    |
| 7        |                                   | 1912  | 87                   | 67.2                              | .204                            | 13.27                              | 21                                             |                      |                 |    |                      | 36 | 30                   |    |
| 8        | 9 plants.....                     | 1912  | 99                   | 68.1                              | .200                            | 13.23                              | 21                                             |                      |                 |    |                      | 46 | 30                   | 2  |
| 9        |                                   | 1913  | 113                  | 67.3                              | .238                            | 15.56                              | 27                                             |                      |                 |    |                      | 48 | 36                   | 2  |
| 10       | 8 plants.....                     | 1913  | 99                   | 67.8                              | .227                            | 15.02                              | 21                                             |                      |                 |    |                      | 44 | 34                   |    |
| 11       |                                   | 1914  | 46                   | 72.0                              | .213                            | 15.30                              |                                                |                      |                 |    | 12                   | 30 | 4                    |    |
| 12       | 9 plants.....                     | 1914  | 52                   | 71.9                              | .213                            | 15.30                              |                                                |                      |                 |    | 18                   | 30 | 4                    |    |
| 13       |                                   | 1915  | 48                   | 72.0                              | .214                            | 15.42                              |                                                |                      |                 |    | 6                    | 38 | 4                    |    |
| 14       | Bottom makers:                    | 1907  | 17                   | 73.4                              | .386                            | 28.10                              |                                                |                      |                 |    | 2                    | 11 | 4                    |    |
| 15       | 9 plants.....                     | 1908  | 17                   | 72.4                              | .283                            | 20.45                              |                                                |                      |                 |    | 4                    | 11 | 2                    |    |
| 16       |                                   | 1909  | 16                   | 73.1                              | .351                            | 25.57                              |                                                |                      |                 |    | 2                    | 11 | 3                    |    |
| 17       |                                   | 1910  | 17                   | 73.5                              | .355                            | 25.92                              |                                                |                      |                 |    |                      | 13 | 2                    | 2  |
| 18       | 10 plants.....                    | 1910  | 19                   | 73.4                              | .346                            | 25.28                              |                                                |                      |                 |    |                      | 15 | 2                    | 2  |
| 19       |                                   | 1911  | 19                   | 71.8                              | .337                            | 24.18                              |                                                |                      |                 |    | 4                    | 15 |                      |    |
| 20       |                                   | 1912  | 20                   | 72.5                              | .345                            | 24.96                              |                                                |                      |                 |    | 4                    | 14 | 2                    |    |
| 21       |                                   | 1913  | 20                   | 73.8                              | .384                            | 28.05                              |                                                |                      |                 |    | 4                    | 10 | 4                    | 2  |
| 22       | 10 plants.....                    | 1913  | 19                   | 73.8                              | .386                            | 28.25                              |                                                |                      |                 |    | 4                    | 9  | 4                    | 2  |
| 23       |                                   | 1914  | 18                   | 73.2                              | .295                            | 21.56                              |                                                |                      |                 |    | 4                    | 10 | 2                    | 2  |
| 24       | 12 plants.....                    | 1914  | 22                   | 73.0                              | .293                            | 21.34                              |                                                |                      |                 |    | 4                    | 14 | 2                    | 2  |
| 25       |                                   | 1915  | 22                   | 73.0                              | .332                            | 24.02                              |                                                |                      |                 |    | 4                    | 14 | 2                    | 2  |
| 26       | Bottom makers' helpers:           |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 27       | 9 plants.....                     | 1907  | 30                   | 73.5                              | .257                            | 18.82                              |                                                |                      |                 |    | 8                    | 14 | 8                    |    |
| 28       |                                   | 1908  | 27                   | 72.2                              | .204                            | 14.75                              |                                                |                      |                 |    | 7                    | 18 | 2                    |    |
| 29       |                                   | 1909  | 29                   | 73.1                              | .234                            | 17.08                              |                                                |                      |                 |    | 8                    | 15 | 6                    |    |
| 30       |                                   | 1910  | 30                   | 72.9                              | .239                            | 17.38                              |                                                |                      |                 |    |                      | 26 | 2                    | 2  |
| 31       | 10 plants.....                    | 1910  | 34                   | 72.8                              | .235                            | 17.10                              |                                                |                      |                 |    |                      | 30 | 2                    | 2  |
| 32       |                                   | 1911  | 31                   | 72.2                              | .234                            | 16.88                              |                                                |                      |                 |    | 10                   | 20 |                      | 1  |
| 33       |                                   | 1912  | 31                   | 72.2                              | .238                            | 17.18                              |                                                |                      |                 |    | 10                   | 19 | 2                    |    |
| 34       | 10 plants.....                    | 1912  | 39                   | 72.4                              | .224                            | 16.19                              |                                                |                      |                 |    | 12                   | 23 | 4                    |    |
| 35       |                                   | 1913  | 40                   | 73.1                              | .255                            | 18.59                              |                                                |                      |                 |    | 12                   | 18 | 8                    | 2  |
| 36       |                                   | 1914  | 33                   | 72.5                              | .226                            | 16.38                              |                                                |                      |                 |    | 12                   | 15 | 4                    | 2  |
| 37       | 12 plants.....                    | 1914  | 39                   | 72.4                              | .225                            | 16.29                              |                                                |                      |                 |    | 12                   | 21 | 4                    | 2  |
| 38       |                                   | 1915  | 38                   | 72.6                              | .239                            | 17.30                              |                                                |                      |                 |    | 6                    | 26 | 4                    | 2  |
| 39       | Ladle liners:                     | 1907  | 21                   | 65.1                              | .454                            | 28.95                              | 6                                              |                      |                 | 1  | 2                    | 10 | 2                    |    |
| 40       | 9 plants.....                     | 1908  | 21                   | 65.6                              | .306                            | 19.78                              | 6                                              |                      |                 | 1  | 4                    | 8  |                      | 2  |
| 41       |                                   | 1909  | 21                   | 65.1                              | .392                            | 25.22                              | 6                                              |                      |                 | 1  | 2                    | 10 | 2                    |    |
| 42       |                                   | 1910  | 23                   | 66.3                              | .383                            | 25.20                              | 6                                              |                      |                 | 1  |                      | 12 | 2                    | 2  |
| 43       | 10 plants.....                    | 1910  | 25                   | 66.8                              | .378                            | 25.05                              | 6                                              |                      |                 | 1  |                      | 14 | 2                    | 2  |
| 44       |                                   | 1911  | 24                   | 68.3                              | .342                            | 22.85                              | 3                                              |                      |                 | 1  | 4                    | 16 |                      |    |
| 45       |                                   | 1912  | 24                   | 68.9                              | .369                            | 24.95                              | 3                                              |                      |                 | 1  | 4                    | 14 | 2                    |    |
| 46       | 10 plants.....                    | 1912  | 22                   | 68.6                              | .384                            | 25.84                              | 3                                              |                      |                 | 1  | 4                    | 12 | 2                    |    |
| 47       |                                   | 1913  | 22                   | 68.7                              | .41                             | 28.22                              | 3                                              |                      |                 | 1  | 4                    | 10 | 4                    |    |
| 48       |                                   | 1914  | 21                   | 68.0                              | .30                             | 20.55                              |                                                | 3                    |                 | 1  | 4                    | 11 | 2                    |    |
| 49       | 12 plants.....                    | 1914  | 25                   | 68.6                              | .304                            | 20.77                              |                                                | 3                    |                 | 1  | 4                    | 15 | 2                    |    |
| 50       |                                   | 1915  | 26                   | 68.8                              | .344                            | 23.47                              |                                                | 3                    |                 | 1  | 4                    | 16 | 2                    |    |
| 51       | Ladle liners' helpers:            | 1907  | 39                   | 68.2                              | .255                            | 16.65                              | 6                                              |                      |                 | 1  | 10                   | 20 | 2                    |    |
| 52       | 9 plants.....                     | 1908  | 31                   | 67.5                              | .209                            | 13.79                              | 6                                              |                      |                 | 1  | 10                   | 12 |                      | 2  |
| 53       |                                   | 1909  | 39                   | 68.5                              | .230                            | 15.26                              | 6                                              |                      |                 | 1  | 10                   | 18 | 4                    |    |
|          |                                   | 1910  | 37                   | 68.5                              | .239                            | 15.83                              | 6                                              |                      |                 | 1  |                      | 24 | 4                    | 2  |

HOURLY, AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES,  
BESSEMER CONVERTERS—Continued.

| Employees whose rates of wages per hour were— |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | Line<br>No. |
|-----------------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|--------------------------|-------------|
| 9 and<br>under<br>10<br>cents.                | 10<br>and<br>under<br>12<br>cents. | 12<br>and<br>under<br>14<br>cents. | 14<br>and<br>under<br>16<br>cents. | 16<br>and<br>under<br>18<br>cents. | 18<br>and<br>under<br>20<br>cents. | 20<br>and<br>under<br>25<br>cents. | 25<br>and<br>under<br>30<br>cents. | 30<br>and<br>under<br>40<br>cents. | 40<br>and<br>under<br>50<br>cents. | 50<br>and<br>under<br>60<br>cents. | 60<br>and<br>under<br>70<br>cents. | 70 cents<br>and<br>over. |             |
|                                               |                                    |                                    | 36                                 | 10                                 | 44                                 | 4                                  | 12                                 | 6                                  | 6                                  |                                    |                                    |                          | 1           |
|                                               |                                    | 5                                  | 36                                 | 8                                  | 16                                 |                                    | 6                                  |                                    |                                    |                                    |                                    |                          | 2           |
|                                               |                                    | 8                                  | 26                                 | 19                                 | 28                                 | 5                                  |                                    | 6                                  |                                    |                                    |                                    |                          | 3           |
|                                               |                                    |                                    | 8                                  | 6                                  | 40                                 | 4                                  | 15                                 | 6                                  |                                    |                                    |                                    |                          | 4           |
|                                               |                                    |                                    | 8                                  | 12                                 | 40                                 | 4                                  | 15                                 | 6                                  |                                    |                                    |                                    |                          | 5           |
|                                               |                                    |                                    | 2                                  | 14                                 | 40                                 |                                    |                                    | 6                                  |                                    |                                    |                                    |                          | 6           |
|                                               |                                    |                                    |                                    | 13                                 | 53                                 | 15                                 |                                    | 6                                  |                                    |                                    |                                    |                          | 7           |
|                                               |                                    |                                    |                                    | 23                                 | 53                                 | 17                                 |                                    | 6                                  |                                    |                                    |                                    |                          | 8           |
|                                               |                                    |                                    |                                    | 2                                  | 10                                 | 66                                 | 20                                 | 9                                  | 6                                  |                                    |                                    |                          | 9           |
|                                               |                                    |                                    |                                    |                                    | 10                                 | 64                                 | 18                                 | 7                                  |                                    |                                    |                                    |                          | 10          |
|                                               |                                    |                                    |                                    |                                    | 4                                  | 42                                 |                                    |                                    |                                    |                                    |                                    |                          | 11          |
|                                               |                                    |                                    |                                    |                                    | 4                                  | 48                                 |                                    |                                    |                                    |                                    |                                    |                          | 12          |
|                                               |                                    |                                    |                                    | 2                                  | 12                                 | 30                                 | 4                                  |                                    |                                    |                                    |                                    |                          | 13          |
|                                               |                                    |                                    |                                    |                                    |                                    | 6                                  | 5                                  | 6                                  | 4                                  |                                    | 2                                  |                          | 14          |
|                                               |                                    |                                    |                                    | 2                                  |                                    | 1                                  | 9                                  |                                    | 4                                  |                                    |                                    |                          | 15          |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  | 3                                  | 8                                  | 4                                  | 4                                  |                                    |                          | 16          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 17          |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  | 5                                  | 8                                  | 4                                  |                                    |                                    |                          | 18          |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  | 6                                  | 7                                  | 2                                  | 2                                  |                                    |                          | 19          |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  | 3                                  | 11                                 | 2                                  | 2                                  |                                    |                          | 20          |
|                                               |                                    |                                    |                                    |                                    |                                    | 4                                  |                                    | 8                                  | 6                                  |                                    | 2                                  |                          | 21          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 22          |
|                                               |                                    |                                    |                                    |                                    | 2                                  | 4                                  | 7                                  | 7                                  | 6                                  |                                    | 2                                  |                          | 23          |
|                                               |                                    |                                    |                                    |                                    |                                    | 7                                  | 2                                  | 5                                  | 2                                  |                                    |                                    |                          | 24          |
|                                               |                                    |                                    |                                    |                                    | 2                                  | 7                                  | 5                                  | 6                                  | 2                                  |                                    |                                    |                          | 25          |
|                                               |                                    |                                    | 2                                  |                                    |                                    | 3                                  | 3                                  | 10                                 | 2                                  | 2                                  |                                    |                          | 26          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 27          |
| 2                                             |                                    | 2                                  |                                    | 2                                  | 8                                  | 12                                 | 2                                  | 4                                  | 4                                  |                                    |                                    |                          | 28          |
|                                               |                                    |                                    | 2                                  |                                    | 8                                  | 9                                  |                                    | 4                                  |                                    |                                    |                                    |                          | 29          |
|                                               |                                    |                                    |                                    |                                    | 10                                 | 11                                 |                                    | 4                                  | 2                                  |                                    |                                    |                          | 30          |
|                                               |                                    |                                    |                                    |                                    | 11                                 | 11                                 | 4                                  |                                    |                                    |                                    |                                    |                          | 31          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 32          |
|                                               |                                    |                                    |                                    | 2                                  | 11                                 | 13                                 | 4                                  | 4                                  |                                    |                                    |                                    |                          | 33          |
|                                               |                                    |                                    | 1                                  | 2                                  | 10                                 | 9                                  | 3                                  | 6                                  |                                    |                                    |                                    |                          | 34          |
|                                               |                                    |                                    | 2                                  | 2                                  | 9                                  | 6                                  | 8                                  | 2                                  | 2                                  |                                    |                                    |                          | 35          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 36          |
|                                               |                                    |                                    | 2                                  | 10                                 | 9                                  | 6                                  | 8                                  | 2                                  | 2                                  |                                    |                                    |                          | 37          |
|                                               |                                    |                                    |                                    | 2                                  | 8                                  | 15                                 | 5                                  | 6                                  | 4                                  |                                    |                                    |                          | 38          |
|                                               |                                    |                                    |                                    |                                    | 2                                  | 22                                 | 4                                  | 3                                  |                                    |                                    |                                    |                          | 39          |
|                                               |                                    |                                    | 2                                  |                                    | 5                                  | 23                                 | 6                                  | 3                                  |                                    |                                    |                                    |                          | 40          |
|                                               |                                    |                                    |                                    |                                    | 8                                  | 12                                 | 8                                  | 4                                  | 2                                  |                                    |                                    |                          | 41          |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  | 3                                  | 5                                  | 4                                  |                                    |                                    |                          | 42          |
|                                               |                                    |                                    |                                    |                                    |                                    | 4                                  | 6                                  | 3                                  | 3                                  | 2                                  | 2                                  | 3                        | 43          |
|                                               |                                    |                                    |                                    |                                    |                                    | 5                                  | 2                                  | 3                                  | 8                                  |                                    |                                    |                          | 44          |
|                                               |                                    |                                    |                                    |                                    |                                    | 4                                  | 2                                  | 7                                  | 5                                  | 5                                  | 2                                  | 1                        | 45          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 46          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 47          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 48          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 49          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 50          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 51          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 52          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 53          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 54          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 55          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 56          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 57          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 58          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 59          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 60          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 61          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 62          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 63          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 64          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 65          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 66          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 67          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 68          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 69          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 70          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 71          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 72          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 73          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 74          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 75          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 76          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 77          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 78          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 79          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 80          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 81          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 82          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          |             |

TABLE C.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER BY YEARS, 1907 TO 1915—

| Line No. | Occupation, and number of plants. | Year. | Number of employ-ees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|-----------------------------------|-------|-----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                   |       |                       |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Ladle liners' helpers—            |       |                       |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 2        | Concluded.                        |       |                       |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 3        | 10 plants.....                    | 1910  | 39                    | 68.7                              | \$0.236                         | \$15.73                            | 6                                              |                      |                 | 1  |                      | 26 | 4                    | 2  |
| 4        |                                   | 1911  | 34                    | 69.1                              | .233                            | 15.75                              | 3                                              |                      |                 | 1  | 14                   | 16 |                      |    |
| 5        |                                   | 1912  | 34                    | 69.6                              | .228                            | 15.43                              | 3                                              |                      |                 | 1  | 14                   | 14 | 2                    |    |
| 6        |                                   | 1913  | 34                    | 69.8                              | .255                            | 17.36                              | 3                                              |                      |                 | 1  | 14                   | 10 | 6                    |    |
| 7        | 9 plants.....                     | 1913  | 38                    | 70.9                              | .247                            | 17.09                              | 3                                              |                      |                 | 1  | 14                   | 8  | 12                   |    |
| 8        |                                   | 1914  | 30                    | 68.8                              | .225                            | 15.32                              |                                                | 3                    |                 | 1  | 14                   | 10 | 2                    |    |
| 9        | 11 plants.....                    | 1914  | 34                    | 69.1                              | .222                            | 15.24                              |                                                | 3                    |                 | 1  | 14                   | 14 | 2                    |    |
| 10       |                                   | 1915  | 34                    | 69.5                              | .233                            | 15.91                              |                                                | 3                    |                 | 1  | 8                    | 20 | 2                    |    |
| 11       | Stopper makers:                   |       |                       |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 12       | 9 plants.....                     | 1907  | 10                    | 72.8                              | .316                            | 23.01                              |                                                |                      |                 | 2  |                      | 4  | 3                    | 1  |
| 13       |                                   | 1908  | 9                     | 72.9                              | .223                            | 16.10                              |                                                |                      |                 | 2  |                      | 4  | 1                    | 2  |
| 14       |                                   | 1909  | 9                     | 71.6                              | .270                            | 19.22                              |                                                |                      |                 | 2  | 2                    | 2  | 1                    | 2  |
| 15       |                                   | 1910  | 11                    | 73.1                              | .263                            | 19.33                              |                                                |                      |                 | 1  |                      | 8  |                      | 2  |
| 16       | 10 plants.....                    | 1910  | 12                    | 73.0                              | .260                            | 19.14                              |                                                |                      |                 | 1  |                      | 9  |                      | 2  |
| 17       |                                   | 1911  | 10                    | 72.0                              | .273                            | 19.53                              |                                                |                      |                 | 2  |                      | 6  |                      | 2  |
| 18       |                                   | 1912  | 10                    | 70.8                              | .272                            | 18.91                              |                                                |                      |                 | 3  |                      | 5  |                      | 2  |
| 19       |                                   | 1913  | 10                    | 70.6                              | .302                            | 21.25                              |                                                |                      |                 | 1  | 1                    | 8  |                      |    |
| 20       |                                   | 1914  | 10                    | 70.0                              | .253                            | 17.67                              |                                                |                      |                 | 1  | 3                    | 6  |                      |    |
| 21       | 12 plants.....                    | 1914  | 12                    | 70.2                              | .251                            | 17.60                              |                                                |                      |                 | 1  | 4                    | 7  |                      |    |
| 22       |                                   | 1915  | 12                    | 69.7                              | .263                            | 18.13                              |                                                |                      |                 | 2  | 1                    | 9  |                      |    |
| 23       | Stopper setters:                  |       |                       |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 24       | 9 plants.....                     | 1907  | 45                    | 51.5                              | .630                            | 31.79                              | 39                                             |                      |                 |    |                      | 4  | 2                    |    |
| 25       |                                   | 1908  | 40                    | 54.3                              | .343                            | 18.50                              | 30                                             |                      |                 |    |                      | 8  | 2                    |    |
| 26       |                                   | 1909  | 34                    | 55.4                              | .552                            | 29.36                              | 24                                             |                      |                 |    |                      | 8  | 2                    |    |
| 27       |                                   | 1910  | 37                    | 51.5                              | .589                            | 30.08                              | 27                                             | 6                    |                 |    |                      | 2  |                      | 2  |
| 28       | 10 plants.....                    | 1910  | 39                    | 52.6                              | .577                            | 29.81                              | 27                                             | 6                    |                 |    |                      | 4  |                      | 2  |
| 29       |                                   | 1911  | 39                    | 55.3                              | .498                            | 26.08                              | 27                                             |                      |                 |    |                      | 12 |                      |    |
| 30       |                                   | 1912  | 42                    | 51.7                              | .496                            | 25.36                              | 36                                             |                      |                 |    |                      | 4  | 2                    |    |
| 31       |                                   | 1913  | 43                    | 51.6                              | .558                            | 28.37                              | 37                                             |                      |                 |    |                      | 4  | 2                    |    |
| 32       | 10 plants.....                    | 1913  | 43                    | 51.6                              | .553                            | 28.01                              | 37                                             |                      |                 |    |                      | 4  | 2                    |    |
| 33       |                                   | 1914  | 38                    | 51.2                              | .363                            | 18.58                              | 24                                             | 9                    |                 |    |                      | 5  |                      |    |
| 34       | 12 plants.....                    | 1914  | 44                    | 50.7                              | .376                            | 19.03                              | 30                                             | 9                    |                 |    |                      | 5  |                      |    |
| 35       |                                   | 1915  | 42                    | 51.5                              | .423                            | 21.76                              | 30                                             | 6                    |                 |    |                      | 6  |                      |    |
| 36       | Steel pourers:                    |       |                       |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 37       | 9 plants.....                     | 1907  | 29                    | 55.4                              | .693                            | 36.39                              | 21                                             |                      |                 |    |                      | 4  | 4                    |    |
| 38       |                                   | 1908  | 28                    | 57.4                              | .439                            | 24.25                              | 18                                             |                      |                 |    |                      | 6  | 4                    |    |
| 39       |                                   | 1909  | 28                    | 57.5                              | .576                            | 31.61                              | 18                                             |                      |                 |    |                      | 6  | 4                    |    |
| 40       |                                   | 1910  | 30                    | 54.5                              | .630                            | 32.94                              | 21                                             | 3                    |                 |    |                      | 2  |                      | 4  |
| 41       | 10 plants.....                    | 1910  | 32                    | 55.6                              | .617                            | 32.74                              | 21                                             | 3                    |                 |    |                      | 4  |                      | 4  |
| 42       |                                   | 1911  | 30                    | 55.1                              | .535                            | 27.91                              | 21                                             |                      |                 |    |                      | 9  |                      |    |
| 43       |                                   | 1912  | 32                    | 54.7                              | .578                            | 30.57                              | 24                                             |                      |                 |    |                      | 4  | 4                    |    |
| 44       | 10 plants.....                    | 1912  | 34                    | 55.7                              | .570                            | 30.65                              | 24                                             |                      |                 |    |                      | 6  | 4                    |    |
| 45       |                                   | 1913  | 34                    | 55.7                              | .633                            | 33.94                              | 24                                             |                      |                 |    |                      | 6  | 4                    |    |
| 46       | 10 plants.....                    | 1913  | 34                    | 55.7                              | .640                            | 34.39                              | 24                                             |                      |                 |    |                      | 6  | 4                    |    |
| 47       |                                   | 1914  | 31                    | 53.4                              | .429                            | 23.12                              | 15                                             | 9                    |                 |    |                      | 7  |                      |    |
| 48       | 12 plants.....                    | 1914  | 37                    | 52.5                              | .444                            | 23.42                              | 21                                             | 9                    |                 |    |                      | 7  |                      |    |
| 49       |                                   | 1915  | 35                    | 53.5                              | .525                            | 27.96                              | 21                                             | 6                    |                 |    |                      | 8  |                      |    |
| 50       | Mold cappers:                     |       |                       |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 51       | 8 plants.....                     | 1907  | 48                    | 54.5                              | .347                            | 18.02                              | 36                                             |                      |                 |    |                      | 8  | 4                    |    |
| 52       |                                   | 1908  | 39                    | 53.7                              | .196                            | 10.57                              | 30                                             |                      |                 |    |                      | 7  | 2                    |    |
| 53       |                                   | 1909  | 43                    | 54.0                              | .271                            | 14.26                              | 33                                             |                      |                 |    |                      | 6  | 4                    |    |
| 54       |                                   | 1910  | 46                    | 55.0                              | .326                            | 17.07                              | 12                                             | 24                   |                 |    |                      | 4  | 2                    | 4  |
| 55       | 9 plants.....                     | 1910  | 52                    | 57.0                              | .314                            | 16.96                              | 12                                             | 24                   |                 |    |                      | 10 | 2                    | 4  |
| 56       |                                   | 1911  | 37                    | 64.2                              | .282                            | 17.36                              | 12                                             |                      |                 |    |                      | 23 | 2                    |    |
| 57       |                                   | 1912  | 44                    | 59.5                              | .324                            | 18.03                              | 24                                             |                      |                 |    |                      | 14 | 6                    |    |
| 58       | 10 plants.....                    | 1912  | 52                    | 61.5                              | .301                            | 17.23                              | 24                                             |                      |                 |    | 6                    | 14 | 8                    |    |
| 59       |                                   | 1913  | 61                    | 59.5                              | .360                            | 20.28                              | 33                                             |                      |                 |    | 6                    | 14 | 8                    |    |



HOURLY AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES,  
BESSEMER CONVERTERS—Continued.

| Employees whose rates of wages per hour were— |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    | Line No. |
|-----------------------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|--------------------|----------|
| 9 and under 10 cents.                         | 10 and under 12 cents. | 12 and under 14 cents. | 14 and under 16 cents. | 16 and under 18 cents. | 18 and under 20 cents. | 20 and under 25 cents. | 25 and under 30 cents. | 30 and under 40 cents. | 40 and under 50 cents. | 50 and under 60 cents. | 60 and under 70 cents. | 70 cents and over. |          |
|                                               |                        |                        |                        | 12                     | 4                      | 15                     | 3                      |                        | 5                      |                        |                        |                    | 1        |
|                                               |                        |                        | 2                      | 10                     | 4                      | 11                     | 2                      | 1                      | 4                      |                        |                        |                    | 2        |
|                                               |                        |                        | 2                      | 10                     | 4                      | 9                      | 4                      | 2                      | 3                      |                        |                        |                    | 3        |
|                                               |                        |                        |                        |                        | 8                      | 18                     | 1                      | 2                      | 5                      |                        |                        |                    | 4        |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        |                        | 14                     | 16                     | 1                      | 2                      | 5                      |                        |                        |                    | 5        |
|                                               |                        |                        |                        | 2                      | 3                      | 19                     | 6                      |                        |                        |                        |                        |                    | 6        |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        | 2                      | 5                      | 21                     | 6                      |                        |                        |                        |                        |                    | 7        |
|                                               |                        |                        | 1                      | 1                      | 10                     | 13                     | 5                      | 4                      |                        |                        |                        |                    | 8        |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        |                        | 1                      | 3                      | 3                      |                        | 3                      |                        |                        |                    | 9        |
|                                               |                        |                        | 1                      | 1                      | 1                      | 4                      | 1                      | 1                      |                        |                        |                        |                    | 10       |
|                                               |                        |                        |                        | 1                      | 1                      | 3                      | 1                      | 2                      | 1                      |                        |                        |                    | 11       |
|                                               |                        |                        |                        |                        | 1                      | 5                      | 2                      | 3                      |                        |                        |                        |                    | 12       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        |                        | 1                      | 6                      | 2                      | 3                      |                        |                        |                        |                    | 13       |
|                                               |                        |                        |                        | 1                      | 1                      | 3                      | 1                      | 4                      |                        |                        |                        |                    | 14       |
|                                               |                        |                        |                        |                        | 2                      | 4                      | 1                      | 2                      | 1                      |                        |                        |                    | 15       |
|                                               |                        |                        |                        |                        |                        | 4                      | 2                      | 3                      | 1                      |                        |                        |                    | 16       |
|                                               |                        |                        |                        |                        | 1                      | 5                      | 2                      | 2                      |                        |                        |                        |                    | 17       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        |                        | 1                      | 7                      | 2                      | 2                      |                        |                        |                        |                    | 18       |
|                                               |                        |                        |                        | 1                      | 7                      | 1                      | 3                      |                        |                        |                        |                        |                    | 19       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        | 6                      | 10                     | 2                      | 1                      | 11                     | 7                      | 6                      | 6                      | 14                 | 20       |
|                                               |                        |                        |                        |                        |                        | 4                      | 4                      | 5                      | 7                      |                        | 2                      | 4                  | 21       |
|                                               |                        |                        |                        |                        |                        |                        |                        | 4                      | 2                      | 5                      | 3                      | 12                 | 22       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        | 3                      | 5                      | 12                 | 23       |
|                                               |                        |                        |                        |                        |                        |                        |                        | 11                     | 6                      |                        |                        |                    |          |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        |                        |                        |                        |                        | 13                     | 6                      | 3                      | 5                      | 12                 | 24       |
|                                               |                        |                        |                        |                        |                        | 5                      | 3                      | 9                      | 7                      | 3                      |                        | 12                 | 25       |
|                                               |                        |                        |                        |                        |                        |                        |                        | 14                     | 15                     | 3                      | 4                      | 6                  | 26       |
|                                               |                        |                        |                        |                        |                        |                        |                        | 8                      | 12                     | 2                      | 9                      | 12                 | 27       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        |                        |                        |                        |                        | 10                     | 10                     | 2                      | 9                      | 12                 | 28       |
|                                               |                        |                        |                        |                        |                        |                        | 7                      | 18                     | 13                     |                        |                        |                    | 29       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        |                        |                        | 2                      | 7                      | 21                     | 13                     | 2                      | 1                      |                    | 30       |
|                                               |                        |                        |                        |                        |                        |                        | 4                      | 13                     | 10                     | 9                      | 4                      |                    | 31       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        |                        |                        |                        | 2                      |                        | 5                      | 3                      | 4                      | 15                 | 32       |
|                                               |                        |                        |                        |                        |                        | 4                      | 5                      | 4                      | 1                      | 9                      | 5                      |                    | 33       |
|                                               |                        |                        |                        |                        |                        |                        | 2                      | 9                      |                        |                        | 5                      | 12                 | 34       |
|                                               |                        |                        |                        |                        |                        |                        | 2                      |                        | 7                      | 6                      | 3                      | 12                 | 35       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        |                        |                        |                        | 2                      |                        | 9                      | 6                      | 3                      | 12                 | 36       |
|                                               |                        |                        |                        | 3                      |                        |                        | 2                      | 2                      | 3                      | 8                      | 9                      | 3                  | 37       |
|                                               |                        |                        |                        |                        |                        |                        | 2                      |                        | 11                     | 10                     | 1                      | 8                  | 38       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        |                        |                        |                        | 2                      |                        | 13                     | 10                     | 1                      | 8                  | 39       |
|                                               |                        |                        |                        |                        |                        |                        |                        | 6                      | 1                      | 11                     | 3                      | 13                 | 40       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        |                        |                        | 4                      | 3                      | 8                      | 2                      | 13                     | 1                      |                    | 41       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    | 42       |
|                                               |                        |                        |                        |                        |                        | 4                      | 3                      | 8                      | 5                      | 14                     | 3                      |                    | 43       |
|                                               |                        |                        |                        |                        |                        |                        | 2                      | 6                      | 5                      | 12                     | 7                      | 3                  | 44       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        | 2                      | 2                      |                        | 4                      | 4                      | 27                     | 3                      | 6                      |                        |                    | 45       |
|                                               |                        |                        | 1                      | 20                     | 8                      | 5                      | 3                      | 2                      |                        |                        |                        |                    | 46       |
|                                               |                        |                        | 2                      | 2                      | 2                      | 26                     |                        | 5                      |                        | 6                      |                        |                    | 47       |
|                                               |                        |                        |                        | 4                      | 4                      | 2                      | 3                      | 27                     |                        | 6                      |                        |                    | 48       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        | 4                      | 4                      | 8                      | 3                      | 27                     |                        | 6                      |                        |                    | 49       |
|                                               |                        |                        |                        | 1                      | 8                      | 6                      | 10                     | 6                      | 6                      |                        |                        |                    | 50       |
|                                               |                        |                        |                        |                        | 8                      | 6                      | 6                      | 16                     | 2                      | 6                      |                        |                    | 51       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        | 5                      | 9                      | 8                      | 6                      | 16                     | 2                      | 6                      |                        |                    | 52       |
|                                               |                        |                        |                        |                        | 4                      | 12                     | 6                      | 13                     | 17                     | 9                      |                        |                    | 53       |

TABLE C.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER BY YEARS, 1907 TO 1915—

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |     |                      |       |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|-----|----------------------|-------|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72  | Over 72 and under 84 | 84    |
| 1        | Mold cappers—Concld.              | 1913  | 51                   | 56.9                              | \$0.382                         | \$20.71                            | 33                                             | —                    | —               | —  | —                    | 14  | 4                    | —     |
| 2        | 8 plants.....                     | 1914  | 31                   | 57.9                              | .267                            | 15.37                              | 15                                             | 3                    | —               | —  | —                    | 13  | —                    | —     |
| 3        | 10 plants.....                    | 1914  | 39                   | 60.8                              | .260                            | 15.67                              | 15                                             | 3                    | —               | —  | —                    | 21  | —                    | —     |
| 4        | 1915                              | 40    | 60.9                 | .294                              | 17.53                           | 15                                 | 3                                              | —                    | —               | —  | 4                    | 18  | —                    | —     |
| 5        | Ingot strippers:                  | 1907  | 29                   | 67.4                              | .310                            | 19.60                              | 9                                              | —                    | —               | —  | 4                    | 6   | 6                    | 4     |
| 6        | 9 plants.....                     | 1908  | 28                   | 68.4                              | .238                            | 16.34                              | 6                                              | —                    | —               | —  | 6                    | 6   | 10                   | —     |
| 7        | 1909                              | 28    | 70.2                 | .264                              | 18.17                           | 6                                  | —                                              | —                    | —               | —  | 4                    | 6   | 6                    | 6     |
| 8        | 1910                              | 29    | 67.9                 | .307                              | 19.85                           | 3                                  | 6                                              | —                    | —               | —  | —                    | 8   | 6                    | 6     |
| 9        | 10 plants.....                    | 1910  | 31                   | 68.1                              | .303                            | 19.69                              | 3                                              | 6                    | —               | —  | —                    | 10  | 6                    | 6     |
| 10       | 1911                              | 27    | 70.4                 | .282                              | 19.26                           | —                                  | 3                                              | —                    | —               | —  | 6                    | 12  | 6                    | —     |
| 11       | 1912                              | 28    | 68.8                 | .320                              | 20.90                           | 3                                  | 3                                              | —                    | —               | —  | 4                    | 8   | 10                   | —     |
| 12       | 1913                              | 28    | 69.9                 | .334                              | 22.81                           | —                                  | 6                                              | —                    | —               | —  | 2                    | 6   | 14                   | —     |
| 13       | 1914                              | 23    | 70.7                 | .304                              | 21.03                           | —                                  | 3                                              | —                    | —               | —  | 2                    | 8   | 8                    | 2     |
| 14       | 12 plants.....                    | 1914  | 29                   | 66.0                              | .313                            | 20.11                              | 6                                              | 3                    | —               | —  | 2                    | 8   | 8                    | 2     |
| 15       | 1915                              | 31    | 66.2                 | .332                              | 21.39                           | 6                                  | 3                                              | —                    | —               | —  | —                    | 12  | 10                   | —     |
| 16       | Laborers:                         | 1907  | 801                  | 78.0                              | .155                            | 12.12                              | —                                              | —                    | —               | 4  | 22                   | 172 | 296                  | 337   |
| 17       | 9 plants.....                     | 1908  | 425                  | 76.2                              | .155                            | 11.80                              | —                                              | —                    | —               | 24 | 34                   | 131 | 93                   | 143   |
| 18       | 1909                              | 564   | 76.9                 | .151                              | 11.62                           | —                                  | 12                                             | —                    | —               | 3  | 20                   | 141 | 221                  | 167   |
| 19       | 1910                              | 748   | 78.1                 | .163                              | 12.69                           | —                                  | —                                              | —                    | —               | 22 | 13                   | 242 | 152                  | 1 319 |
| 20       | 10 plants.....                    | 1910  | 786                  | 77.8                              | .163                            | 12.69                              | —                                              | —                    | —               | 23 | 13                   | 275 | 154                  | 1 321 |
| 21       | 1911                              | 593   | 74.6                 | .166                              | 12.39                           | —                                  | —                                              | —                    | —               | 27 | 25                   | 253 | 215                  | 73    |
| 22       | 1912                              | 626   | 75.7                 | .167                              | 12.64                           | —                                  | —                                              | —                    | 1               | 17 | 29                   | 242 | 174                  | 163   |
| 23       | 10 plants.....                    | 1912  | 620                  | 75.8                              | .167                            | 12.68                              | —                                              | —                    | 1               | 17 | 30                   | 238 | 164                  | 170   |
| 24       | 1913                              | 681   | 75.1                 | .192                              | 14.38                           | —                                  | —                                              | —                    | —               | 8  | 38                   | 270 | 227                  | 138   |
| 25       | 10 plants.....                    | 1913  | 575                  | 75.2                              | .192                            | 14.43                              | —                                              | —                    | 1               | 5  | 44                   | 207 | 187                  | 131   |
| 26       | 1914                              | 450   | 75.7                 | .192                              | 14.57                           | —                                  | —                                              | —                    | 2               | —  | 29                   | 215 | 73                   | 131   |
| 27       | 12 plants.....                    | 1914  | 546                  | 74.0                              | .193                            | 14.27                              | —                                              | —                    | 2               | 39 | 45                   | 256 | 73                   | 131   |
| 28       | 1915                              | 496   | 74.3                 | .193                              | 14.31                           | —                                  | —                                              | —                    | —               | 39 | 46                   | 223 | 50                   | 138   |
| 29       | Unclassified—productive:          | 1914  | 652                  | 69.7                              | .237                            | 16.23                              | 39                                             | 51                   | 1               | 5  | 96                   | 281 | 140                  | 39    |
| 30       | 12 plants.....                    | 1915  | 666                  | 69.8                              | .247                            | 16.93                              | 49                                             | 39                   | 1               | 2  | 70                   | 360 | 112                  | 33    |
| 31       | Unclassified—nonproductive:       | 1914  | 356                  | 72.3                              | .233                            | 16.81                              | —                                              | —                    | —               | 27 | 52                   | 132 | 21                   | 102   |
| 32       | 12 plants.....                    | 1915  | 365                  | 73.2                              | .230                            | 16.79                              | —                                              | —                    | —               | 28 | 48                   | 19  | 22                   | 109   |

<sup>1</sup> Including 54 employees whose full-time hours per week were 85.

HOURLY, AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES,  
BESSEMER CONVERTERS—Concluded.

| Employees whose rates of wages per hour were— |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | Line<br>No. |
|-----------------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|--------------------------|-------------|
| 9 and<br>under<br>10<br>cents.                | 10<br>and<br>under<br>12<br>cents. | 12<br>and<br>under<br>14<br>cents. | 14<br>and<br>under<br>16<br>cents. | 16<br>and<br>under<br>18<br>cents. | 18<br>and<br>under<br>20<br>cents. | 20<br>and<br>under<br>25<br>cents. | 25<br>and<br>under<br>30<br>cents. | 30<br>and<br>under<br>40<br>cents. | 40<br>and<br>under<br>50<br>cents. | 50<br>and<br>under<br>60<br>cents. | 60<br>and<br>under<br>70<br>cents. | 70 cents<br>and<br>over. |             |
|                                               |                                    |                                    |                                    |                                    | 4                                  | 8                                  |                                    | 13                                 |                                    |                                    |                                    |                          | 1           |
|                                               |                                    |                                    |                                    |                                    | 4                                  | 12                                 | 3                                  | 12                                 | 17                                 | 9                                  |                                    |                          | 2           |
|                                               |                                    |                                    |                                    |                                    | 4                                  | 20                                 | 3                                  | 12                                 |                                    |                                    |                                    |                          | 3           |
|                                               |                                    |                                    |                                    | 1                                  | 3                                  | 13                                 | 5                                  | 16                                 | 2                                  |                                    |                                    |                          | 4           |
|                                               |                                    |                                    |                                    |                                    |                                    | 12                                 | 6                                  | 5                                  | 4                                  | 2                                  |                                    |                          | 5           |
|                                               |                                    |                                    |                                    |                                    | 4                                  | 12                                 | 10                                 | 2                                  |                                    |                                    |                                    |                          | 6           |
|                                               |                                    |                                    |                                    |                                    |                                    | 12                                 | 10                                 | 6                                  |                                    |                                    |                                    |                          | 7           |
|                                               |                                    |                                    |                                    |                                    |                                    | 8                                  | 12                                 |                                    | 9                                  |                                    |                                    |                          | 8           |
|                                               |                                    |                                    |                                    |                                    |                                    | 10                                 | 12                                 |                                    | 9                                  |                                    |                                    |                          | 9           |
|                                               |                                    |                                    |                                    |                                    | 4                                  | 8                                  | 10                                 |                                    | 5                                  |                                    |                                    |                          | 10          |
|                                               |                                    |                                    |                                    |                                    |                                    | 8                                  | 12                                 | 2                                  |                                    | 6                                  |                                    |                          | 11          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 16                                 | 4                                  | 8                                  |                                    |                                    |                          | 12          |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  | 16                                 | 1                                  | 4                                  |                                    |                                    |                          | 13          |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  | 16                                 | 7                                  | 4                                  |                                    |                                    |                          | 14          |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  | 12                                 | 10                                 | 7                                  |                                    |                                    |                          | 15          |
|                                               |                                    |                                    |                                    | 571                                | 230                                |                                    |                                    |                                    |                                    |                                    |                                    |                          | 16          |
|                                               |                                    |                                    |                                    | 327                                | 98                                 |                                    |                                    |                                    |                                    |                                    |                                    |                          | 17          |
|                                               |                                    | 92                                 |                                    | 309                                | 163                                |                                    |                                    |                                    |                                    |                                    |                                    |                          | 18          |
|                                               |                                    |                                    |                                    | 204                                | 544                                |                                    |                                    |                                    |                                    |                                    |                                    |                          | 19          |
|                                               |                                    |                                    |                                    | 204                                | 582                                |                                    |                                    |                                    |                                    |                                    |                                    |                          | 20          |
|                                               |                                    |                                    |                                    | 105                                | 488                                |                                    |                                    |                                    |                                    |                                    |                                    |                          | 21          |
|                                               |                                    |                                    |                                    | 49                                 | 577                                |                                    |                                    |                                    |                                    |                                    |                                    |                          | 22          |
|                                               |                                    |                                    |                                    | 42                                 | 578                                |                                    |                                    |                                    |                                    |                                    |                                    |                          | 23          |
|                                               |                                    |                                    |                                    |                                    | 135                                | 354                                | 192                                |                                    |                                    |                                    |                                    |                          | 24          |
|                                               |                                    |                                    |                                    |                                    | 113                                | 301                                | 161                                |                                    |                                    |                                    |                                    |                          | 25          |
|                                               |                                    |                                    |                                    |                                    | 81                                 | 266                                | 103                                |                                    |                                    |                                    |                                    |                          | 26          |
|                                               |                                    |                                    |                                    |                                    | 81                                 | 307                                | 158                                |                                    |                                    |                                    |                                    |                          | 27          |
|                                               |                                    |                                    |                                    |                                    | 70                                 | 304                                | 122                                |                                    |                                    |                                    |                                    |                          | 28          |
|                                               |                                    |                                    | 14                                 |                                    | 19                                 | 64                                 | 329                                | 145                                | 74                                 | 7                                  |                                    |                          | 29          |
|                                               |                                    |                                    |                                    |                                    | 31                                 | 67                                 | 293                                | 160                                | 91                                 | 19                                 | 4                                  | 1                        | 30          |
|                                               |                                    |                                    |                                    |                                    | 10                                 | 51                                 | 205                                | 46                                 | 40                                 | 3                                  |                                    | 1                        | 31          |
|                                               |                                    |                                    |                                    |                                    | 7                                  | 54                                 | 210                                | 55                                 | 38                                 | 1                                  |                                    |                          | 32          |

## 136 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

TABLE D.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, 1913 TO 1915—*BESSEMER*

[The abbreviation "G. L. and M. W." in this table stands for "Great Lakes and

| Line No. | Occupation, district, and number of plants. | Year. | Num-ber of em-ploy-ees. | Aver-age full-time hours per week. | Aver-age rate of wages per hour. | Aver-age full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|---------------------------------------------|-------|-------------------------|------------------------------------|----------------------------------|-------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                             |       |                         |                                    |                                  |                                     | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Stockers:                                   |       |                         |                                    |                                  |                                     |                                                |                      |                 |    |                      |    |                      |    |
| 2        | Pittsburgh—                                 | 1913  | 176                     | 56.8                               | \$0.421                          | \$22.54                             | 44                                             | 72                   |                 |    | 29                   | 6  | 19                   | 6  |
| 3        | 4 plants.....                               | 1914  | 142                     | 55.2                               | .356                             | 18.57                               | 90                                             | 6                    | 2               |    | 30                   | 2  | 12                   |    |
| 4        | 4 plants.....                               | 1914  | 129                     | 51.1                               | .377                             | 18.68                               | 105                                            | 6                    | 2               |    | 2                    | 2  | 12                   |    |
| 5        | G. L. and M. W.—                            | 1915  | 128                     | 52.2                               | .328                             | 16.56                               | 96                                             | 6                    |                 | 6  | 2                    | 6  | 12                   |    |
| 6        | 1 plant.....                                | 1913  | 18                      | 70.7                               | .248                             | 17.50                               |                                                |                      |                 |    | 2                    |    | 16                   |    |
| 7        |                                             | 1914  | 20                      | 70.8                               | .303                             | 21.31                               |                                                |                      |                 |    | 2                    |    | 18                   |    |
| 8        | 2 plants.....                               | 1914  | 38                      | 70.7                               | .259                             | 18.26                               |                                                |                      | 2               | 2  |                      | 34 |                      |    |
| 9        |                                             | 1915  | 29                      | 70.7                               | .245                             | 17.34                               |                                                |                      | 2               | 1  |                      | 26 |                      |    |
| 10       | Total—                                      |       |                         |                                    |                                  |                                     |                                                |                      |                 |    |                      |    |                      |    |
| 11       | 5 plants.....                               | 1913  | 194                     | 58.1                               | .405                             | 22.07                               | 44                                             | 72                   |                 | 2  | 29                   | 22 | 19                   | 6  |
| 12       |                                             | 1914  | 162                     | 57.1                               | .349                             | 18.91                               | 90                                             | 6                    | 2               | 2  | 30                   | 20 | 12                   |    |
| 13       | 6 plants.....                               | 1914  | 167                     | 55.5                               | .351                             | 18.59                               | 105                                            | 6                    | 4               | 2  | 2                    | 36 | 12                   |    |
| 14       |                                             | 1915  | 157                     | 55.6                               | .313                             | 16.70                               | 96                                             | 6                    | 2               | 7  | 2                    | 32 | 12                   |    |
| 15       | Cupola melters:                             |       |                         |                                    |                                  |                                     |                                                |                      |                 |    |                      |    |                      |    |
| 16       | Pittsburgh—                                 | 1913  | 12                      | 60.2                               | .513                             | 29.93                               | 3                                              | 3                    |                 |    | 6                    |    |                      |    |
| 17       | 4 plants.....                               | 1914  | 12                      | 60.5                               | .333                             | 19.47                               | 3                                              | 3                    |                 |    | 2                    | 4  |                      |    |
| 18       | 4 plants.....                               | 1914  | 11                      | 53.8                               | .389                             | 20.65                               | 3                                              | 6                    |                 |    | 2                    |    |                      |    |
| 19       | G. L. and M. W.—                            | 1915  | 11                      | 53.6                               | .471                             | 24.74                               | 3                                              | 6                    |                 |    |                      | 2  |                      |    |
| 20       | 1 plant.....                                | 1913  | 2                       | 78.0                               | .470                             | 36.66                               |                                                |                      |                 |    |                      |    | 2                    |    |
| 21       |                                             | 1914  | 2                       | 78.0                               | .424                             | 33.03                               |                                                |                      |                 |    |                      |    | 2                    |    |
| 22       | 2 plants.....                               | 1914  | 4                       | 75.0                               | .392                             | 29.49                               |                                                |                      |                 |    |                      | 2  | 2                    |    |
| 23       |                                             | 1915  | 4                       | 75.0                               | .387                             | 29.10                               |                                                |                      |                 |    |                      | 2  | 2                    |    |
| 24       | Total—                                      |       |                         |                                    |                                  |                                     |                                                |                      |                 |    |                      |    |                      |    |
| 25       | 5 plants.....                               | 1913  | 14                      | 62.7                               | .507                             | 30.89                               | 3                                              | 3                    |                 |    | 6                    |    | 2                    |    |
| 26       |                                             | 1914  | 14                      | 63.0                               | .346                             | 21.40                               | 3                                              | 3                    |                 |    | 2                    | 4  | 2                    |    |
| 27       | 6 plants.....                               | 1914  | 15                      | 59.5                               | .390                             | 23.00                               | 3                                              | 6                    |                 |    | 2                    | 2  | 2                    |    |
| 28       |                                             | 1915  | 15                      | 59.3                               | .449                             | 25.90                               | 3                                              | 6                    |                 |    |                      | 4  | 2                    |    |
| 29       | Cupola tappers:                             |       |                         |                                    |                                  |                                     |                                                |                      |                 |    |                      |    |                      |    |
| 30       | Pittsburgh—                                 | 1913  | 18                      | 50.3                               | .482                             | 24.25                               |                                                | 18                   |                 |    |                      |    |                      |    |
| 31       | 1 plant.....                                | 1914  | 18                      | 50.3                               | .263                             | 13.24                               |                                                | 18                   |                 |    |                      |    |                      |    |
| 32       | 2 plants.....                               | 1914  | 24                      | 50.6                               | .275                             | 13.93                               |                                                | 24                   |                 |    |                      |    |                      |    |
| 33       |                                             | 1915  | 18                      | 50.3                               | .338                             | 17.00                               |                                                | 18                   |                 |    |                      |    |                      |    |
| 34       | G. L. and M. W.—                            | 1913  | 4                       | 72.0                               | .368                             | 26.50                               |                                                |                      |                 |    |                      | 4  |                      |    |
| 35       | 1 plant.....                                | 1914  | 4                       | 72.0                               | .332                             | 23.90                               |                                                |                      |                 |    |                      | 4  |                      |    |
| 36       | 2 plants.....                               | 1914  | 10                      | 72.0                               | .313                             | 22.56                               |                                                |                      |                 |    |                      | 10 |                      |    |
| 37       |                                             | 1915  | 6                       | 72.0                               | .316                             | 22.75                               |                                                |                      |                 |    |                      | 6  |                      |    |
| 38       | Total—                                      |       |                         |                                    |                                  |                                     |                                                |                      |                 |    |                      |    |                      |    |
| 39       | 2 plants.....                               | 1913  | 22                      | 54.3                               | .461                             | 24.66                               |                                                | 18                   |                 |    |                      | 4  |                      |    |
| 40       |                                             | 1914  | 22                      | 54.3                               | .276                             | 15.18                               |                                                | 18                   |                 |    |                      | 4  |                      |    |
| 41       | 4 plants.....                               | 1914  | 34                      | 56.9                               | .286                             | 16.47                               |                                                | 24                   |                 |    |                      | 10 |                      |    |
| 42       |                                             | 1915  | 24                      | 55.8                               | .332                             | 18.43                               |                                                | 18                   |                 |    |                      | 6  |                      |    |
| 43       | Blowers:                                    |       |                         |                                    |                                  |                                     |                                                |                      |                 |    |                      |    |                      |    |
| 44       | Pittsburgh—                                 | 1913  | 15                      | 57.7                               | .622                             | 35.41                               | 6                                              | 3                    |                 |    | 2                    | 4  |                      |    |
| 45       | 6 plants.....                               | 1914  | 14                      | 61.7                               | .540                             | 32.65                               | 3                                              | 3                    |                 |    | 2                    | 6  |                      |    |
| 46       | 7 plants.....                               | 1914  | 16                      | 63.0                               | .529                             | 32.61                               | 3                                              | 3                    |                 |    | 2                    | 8  |                      |    |
| 47       |                                             | 1915  | 16                      | 62.9                               | .557                             | 34.72                               | 3                                              | 3                    |                 |    | 2                    | 8  |                      |    |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
CONVERTERS.

Middle West." The figures for each group of years are for identical plants.]

| Employees whose rates of wages per hour were— |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | Line<br>No. |
|-----------------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|--------------------------|-------------|
| 9 and<br>under<br>10<br>cents.                | 10<br>and<br>under<br>12<br>cents. | 12<br>and<br>under<br>14<br>cents. | 14<br>and<br>under<br>16<br>cents. | 16<br>and<br>under<br>18<br>cents. | 18<br>and<br>under<br>20<br>cents. | 20<br>and<br>under<br>25<br>cents. | 25<br>and<br>under<br>30<br>cents. | 30<br>and<br>under<br>40<br>cents. | 40<br>and<br>under<br>50<br>cents. | 50<br>and<br>under<br>60<br>cents. | 60<br>and<br>under<br>70<br>cents. | 70 cents<br>and<br>over. |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          |             |
|                                               |                                    |                                    |                                    |                                    | 9                                  | 35                                 | 4                                  | 18                                 | 62                                 | 36                                 | 12                                 |                          | 1           |
|                                               |                                    |                                    |                                    | 1                                  | 17                                 | 26                                 | 20                                 | 6                                  | 60                                 | 12                                 |                                    |                          | 2           |
|                                               |                                    |                                    |                                    | 1                                  | 7                                  | 18                                 | 25                                 | 6                                  | 60                                 | 12                                 |                                    |                          | 3           |
|                                               |                                    |                                    |                                    | 3                                  | 2                                  | 39                                 | 6                                  | 45                                 | 30                                 | 3                                  |                                    |                          | 4           |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  | 16                                 |                                    |                                    |                                    |                                    |                          | 5           |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  | 16                                 |                                    | 2                                  |                                    |                                    |                          | 6           |
|                                               |                                    |                                    |                                    |                                    | 2                                  | 18                                 | 16                                 |                                    | 2                                  |                                    |                                    |                          | 7           |
|                                               |                                    |                                    |                                    |                                    | 2                                  | 10                                 | 17                                 |                                    |                                    |                                    |                                    |                          | 8           |
|                                               |                                    |                                    |                                    |                                    | 9                                  | 37                                 | 20                                 | 18                                 | 62                                 | 36                                 | 12                                 |                          | 9           |
|                                               |                                    |                                    |                                    | 1                                  | 17                                 | 28                                 | 36                                 | 6                                  | 62                                 | 12                                 |                                    |                          | 10          |
|                                               |                                    |                                    |                                    | 1                                  | 9                                  | 36                                 | 41                                 | 6                                  | 62                                 | 12                                 |                                    |                          | 11          |
|                                               |                                    |                                    |                                    | 3                                  | 4                                  | 49                                 | 23                                 | 45                                 | 30                                 | 3                                  |                                    |                          | 12          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  |                                    | 5                                  | 3                                  |                          | 13          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 7                                  | 1                                  |                                    |                                    |                          | 14          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 7                                  | 4                                  |                                    |                                    |                          | 15          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 5                                  |                                    | 6                                  |                                    |                          | 16          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                          | 17          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                          | 18          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 2                                  |                                    |                                    |                          | 19          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 2                                  |                                    |                                    |                          | 20          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 2                                  | 5                                  | 3                                  |                          | 21          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 7                                  | 3                                  |                                    |                                    |                          | 22          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 9                                  | 6                                  |                                    |                                    |                          | 23          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 7                                  | 2                                  | 6                                  |                                    |                          | 24          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 18                                 |                                    |                                    |                          | 25          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 18                                 |                                    |                                    |                                    |                                    |                          | 26          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 6                                  |                                    |                                    |                                    |                          | 27          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 18                                 |                                    |                                    |                                    |                          | 28          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  |                                    |                                    |                                    |                          | 29          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  |                                    |                                    |                                    |                          | 30          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 10                                 |                                    |                                    |                                    |                          | 31          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 5                                  |                                    |                                    |                                    |                          | 32          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 18                                 |                                    |                                    |                          | 33          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 18                                 | 4                                  |                                    |                                    |                                    |                          | 34          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 18                                 | 16                                 |                                    |                                    |                          | 35          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 23                                 |                                    |                                    |                                    |                          | 36          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 5                                  | 5                                  | 3                        | 37          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 5                                  | 6                                  | 3                                  |                          | 38          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 7                                  | 6                                  | 3                                  |                          | 39          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 5                                  | 6                                  | 5                                  |                          | 40          |

TABLE D.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—*BESSEMER*

| Line No.       | Occupation, district, and number of plants.             | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |       |                      |       |                      |       |
|----------------|---------------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-------|----------------------|-------|----------------------|-------|
|                |                                                         |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60    | Over 60 and under 72 | 72    | Over 72 and under 84 | 84    |
| 1<br>2         | Blowers—Concluded.<br>G. L. and M. W.—<br>4 plants..... | 1913  | 8                    | 73.9                              | \$0.554                         | \$40.93                            | .....                                          | .....                | .....           | ..... | .....                | 4     | 4                    | ..... |
|                |                                                         | 1914  | 8                    | 72.4                              | .549                            | 39.79                              | .....                                          | .....                | .....           | ..... | .....                | 6     | 2                    | ..... |
| 3<br>4         | 5 plants.....                                           | 1914  | 11                   | 65.7                              | .569                            | 37.08                              | 3                                              | .....                | .....           | ..... | .....                | 6     | 2                    | ..... |
|                |                                                         | 1915  | 11                   | 65.7                              | .565                            | 36.92                              | 3                                              | .....                | .....           | ..... | .....                | 6     | 2                    | ..... |
| 5<br>6         | Total—<br>10 plants.....                                | 1913  | 23                   | 63.3                              | .598                            | 37.33                              | 6                                              | 3                    | .....           | ..... | 2                    | 8     | 4                    | ..... |
|                |                                                         | 1914  | 22                   | 65.6                              | .543                            | 35.25                              | 3                                              | 3                    | .....           | ..... | 2                    | 12    | 2                    | ..... |
| 7<br>8         | 12 plants.....                                          | 1914  | 27                   | 64.1                              | .545                            | 34.43                              | 6                                              | 3                    | .....           | ..... | 2                    | 14    | 2                    | ..... |
|                |                                                         | 1915  | 27                   | 64.0                              | .561                            | 35.61                              | 6                                              | 3                    | .....           | ..... | 2                    | 14    | 2                    | ..... |
| 9<br>10        | Regulators, first:<br>Pittsburgh—<br>6 plants.....      | 1913  | 14                   | 63.1                              | .493                            | 31.49                              | 6                                              | .....                | .....           | ..... | 2                    | ..... | 6                    | ..... |
|                |                                                         | 1914  | 13                   | 67.7                              | .315                            | 21.02                              | 3                                              | .....                | .....           | ..... | 4                    | 2     | 4                    | ..... |
| 11<br>12       | 7 plants.....                                           | 1914  | 16                   | 64.0                              | .321                            | 20.18                              | 6                                              | .....                | .....           | ..... | 4                    | 2     | 4                    | ..... |
|                |                                                         | 1915  | 16                   | 64.4                              | .346                            | 22.43                              | 6                                              | .....                | .....           | ..... | .....                | 4     | 6                    | ..... |
| 13<br>14       | G. L. and M. W.—<br>3 plants.....                       | 1913  | 6                    | 74.0                              | .464                            | 33.95                              | .....                                          | .....                | .....           | ..... | .....                | 4     | 2                    | ..... |
|                |                                                         | 1914  | 5                    | 72.6                              | .348                            | 25.27                              | .....                                          | .....                | .....           | ..... | .....                | 3     | 2                    | ..... |
| 15<br>16       | 4 plants.....                                           | 1914  | 8                    | 63.4                              | .343                            | 21.78                              | 3                                              | .....                | .....           | ..... | .....                | 3     | 2                    | ..... |
|                |                                                         | 1915  | 10                   | 65.1                              | .360                            | 23.67                              | 3                                              | .....                | .....           | ..... | .....                | 5     | 2                    | ..... |
| 17<br>18       | Total—<br>9 plants.....                                 | 1913  | 20                   | 66.4                              | .484                            | 32.23                              | 6                                              | .....                | .....           | ..... | 2                    | 4     | 8                    | ..... |
|                |                                                         | 1914  | 18                   | 69.0                              | .324                            | 22.20                              | 3                                              | .....                | .....           | ..... | 4                    | 5     | 6                    | ..... |
| 19<br>20       | 11 plants.....                                          | 1914  | 24                   | 63.8                              | .328                            | 20.71                              | 9                                              | .....                | .....           | ..... | 4                    | 5     | 6                    | ..... |
|                |                                                         | 1915  | 26                   | 64.7                              | .351                            | 22.91                              | 9                                              | .....                | .....           | ..... | .....                | 9     | 8                    | ..... |
| 21<br>22       | Regulators, second:<br>Pittsburgh—<br>6 plants.....     | 1913  | 14                   | 62.0                              | .437                            | 27.73                              | 6                                              | .....                | .....           | ..... | 4                    | ..... | 4                    | ..... |
|                |                                                         | 1914  | 13                   | 66.5                              | .299                            | 19.72                              | 3                                              | .....                | .....           | ..... | 4                    | 2     | 4                    | ..... |
| 23<br>24       | 7 plants.....                                           | 1914  | 16                   | 63.0                              | .308                            | 19.13                              | 6                                              | .....                | .....           | ..... | 4                    | 2     | 4                    | ..... |
|                |                                                         | 1915  | 16                   | 63.1                              | .327                            | 20.69                              | 6                                              | .....                | .....           | ..... | 2                    | 4     | 4                    | ..... |
| 25<br>26<br>27 | G. L. and M. W.—<br>4 plants.....                       | 1913  | 14                   | 74.6                              | .350                            | 25.89                              | .....                                          | .....                | .....           | ..... | .....                | 8     | 6                    | ..... |
|                |                                                         | 1914  | 9                    | 72.7                              | .255                            | 18.49                              | .....                                          | .....                | .....           | ..... | .....                | 5     | 4                    | ..... |
|                |                                                         | 1915  | 10                   | 72.3                              | .320                            | 23.16                              | .....                                          | .....                | .....           | ..... | .....                | 8     | 2                    | ..... |
| 28<br>29       | Total—<br>10 plants.....                                | 1913  | 28                   | 68.3                              | .394                            | 26.81                              | 6                                              | .....                | .....           | ..... | 4                    | 8     | 10                   | ..... |
|                |                                                         | 1914  | 22                   | 69.0                              | .281                            | 19.22                              | 3                                              | .....                | .....           | ..... | 4                    | 7     | 8                    | ..... |
| 30<br>31       | 11 plants.....                                          | 1914  | 25                   | 66.5                              | .289                            | 18.90                              | 6                                              | .....                | .....           | ..... | .....                | 7     | 8                    | ..... |
|                |                                                         | 1915  | 26                   | 66.6                              | .324                            | 21.64                              | 6                                              | .....                | .....           | ..... | 2                    | 12    | 6                    | ..... |
| 32<br>33       | Vessel men:<br>Pittsburgh—<br>6 plants.....             | 1913  | 17                   | 53.2                              | .780                            | 41.03                              | 6                                              | 9                    | .....           | ..... | .....                | ..... | 2                    | ..... |
|                |                                                         | 1914  | 17                   | 53.2                              | .518                            | 27.64                              | 6                                              | 9                    | .....           | ..... | .....                | ..... | 2                    | ..... |
| 34<br>35       | 7 plants.....                                           | 1914  | 20                   | 53.6                              | .510                            | 27.42                              | 6                                              | 9                    | 3               | ..... | .....                | ..... | 2                    | ..... |
|                |                                                         | 1915  | 20                   | 53.5                              | .562                            | 30.19                              | 6                                              | 12                   | .....           | ..... | .....                | ..... | 2                    | ..... |
| 36<br>37       | G. L. and M. W.—<br>4 plants.....                       | 1913  | 9                    | 66.7                              | .675                            | 42.46                              | .....                                          | 3                    | .....           | ..... | .....                | 4     | 2                    | ..... |
|                |                                                         | 1914  | 8                    | 63.4                              | .436                            | 27.88                              | .....                                          | 3                    | .....           | ..... | .....                | 5     | .....                | ..... |
| 38<br>39       | 5 plants.....                                           | 1914  | 11                   | 59.2                              | .478                            | 28.02                              | 3                                              | 3                    | .....           | ..... | .....                | 5     | .....                | ..... |
|                |                                                         | 1915  | 12                   | 60.3                              | .539                            | 32.00                              | 3                                              | 3                    | .....           | ..... | .....                | 6     | .....                | ..... |
| 40<br>41       | Total—<br>10 plants.....                                | 1913  | 26                   | 57.8                              | .744                            | 41.52                              | 6                                              | 12                   | .....           | ..... | .....                | 4     | 4                    | ..... |
|                |                                                         | 1914  | 25                   | 56.4                              | .492                            | 27.71                              | 6                                              | 12                   | .....           | ..... | .....                | 5     | 2                    | ..... |
| 42<br>43       | 12 plants.....                                          | 1914  | 31                   | 55.6                              | .499                            | 27.64                              | 9                                              | 12                   | 3               | ..... | .....                | 5     | 2                    | ..... |
|                |                                                         | 1915  | 32                   | 56.0                              | .554                            | 30.87                              | 9                                              | 15                   | .....           | ..... | .....                | 6     | 2                    | ..... |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
CONVERTERS—Continued.

| Employees whose rates of wages per hour were— |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    | Line No. |
|-----------------------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|--------------------|----------|
| 9 and under 10 cents.                         | 10 and under 12 cents. | 12 and under 14 cents. | 14 and under 16 cents. | 16 and under 18 cents. | 18 and under 20 cents. | 20 and under 25 cents. | 25 and under 30 cents. | 30 and under 40 cents. | 40 and under 50 cents. | 50 and under 60 cents. | 60 and under 70 cents. | 70 cents and over. |          |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        | 6                      |                        |                        |                    | 1        |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        | 6                      |                        |                        |                    | 2        |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        | 6                      | 1                      | 2                      |                    | 3        |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        | 6                      | 2                      | 1                      |                    | 4        |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        | 8                      | 5                      | 5                      |                    | 5        |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        | 11                     | 6                      | 3                      |                    | 6        |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        | 13                     | 7                      | 5                      |                    | 7        |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        | 11                     | 8                      | 6                      |                    | 8        |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        | 9                      | 3                      | 2                      |                    | 9        |
|                                               |                        |                        |                        |                        |                        | 4                      | 2                      | 6                      | 1                      |                        |                        |                    | 10       |
|                                               |                        |                        |                        |                        |                        | 4                      | 2                      | 9                      | 1                      |                        |                        |                    | 11       |
|                                               |                        |                        |                        |                        |                        | 2                      | 3                      | 4                      | 7                      |                        |                        |                    | 12       |
|                                               |                        |                        |                        |                        |                        |                        | 2                      |                        |                        | 4                      |                        |                    | 13       |
|                                               |                        |                        |                        |                        |                        | 1                      |                        | 2                      | 2                      |                        |                        |                    | 14       |
|                                               |                        |                        |                        |                        |                        | 1                      |                        | 5                      | 2                      |                        |                        |                    | 15       |
|                                               |                        |                        |                        |                        |                        | 1                      | 1                      | 6                      |                        | 2                      |                        |                    | 16       |
|                                               |                        |                        |                        |                        |                        |                        | 2                      |                        | 9                      | 7                      | 2                      |                    | 17       |
|                                               |                        |                        |                        |                        |                        | 5                      | 2                      | 8                      | 3                      |                        |                        |                    | 18       |
|                                               |                        |                        |                        |                        |                        | 5                      | 2                      | 14                     | 3                      |                        |                        |                    | 19       |
|                                               |                        |                        |                        |                        |                        | 3                      | 4                      | 10                     | 7                      | 2                      |                        |                    | 20       |
|                                               |                        |                        |                        |                        |                        |                        |                        | 6                      | 4                      | 2                      | 2                      |                    | 21       |
|                                               |                        |                        |                        |                        | 1                      | 3                      | 2                      | 6                      | 1                      |                        |                        |                    | 22       |
|                                               |                        |                        |                        |                        | 1                      | 3                      | 2                      | 9                      | 1                      |                        |                        |                    | 23       |
|                                               |                        |                        |                        |                        |                        | 5                      | 2                      | 3                      | 6                      |                        |                        |                    | 24       |
|                                               |                        |                        |                        |                        |                        | 4                      | 4                      |                        | 5                      | 1                      |                        |                    | 25       |
|                                               |                        |                        |                        | 2                      | 2                      | 1                      | 2                      |                        | 2                      |                        |                        |                    | 26       |
|                                               |                        |                        |                        |                        |                        | 2                      | 4                      | 2                      | 2                      |                        |                        |                    | 27       |
|                                               |                        |                        |                        |                        |                        | 4                      | 4                      | 6                      | 9                      | 3                      | 2                      |                    | 28       |
|                                               |                        |                        |                        | 2                      | 3                      | 4                      | 4                      | 6                      | 3                      |                        |                        |                    | 29       |
|                                               |                        |                        |                        |                        |                        | 4                      | 4                      | 9                      | 3                      |                        |                        |                    | 30       |
|                                               |                        |                        |                        | 2                      | 3                      | 7                      | 6                      | 5                      | 8                      |                        |                        |                    | 31       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        | 2                      | 6                      |                    | 32       |
|                                               |                        |                        |                        |                        |                        |                        |                        | 3                      | 1                      | 11                     | 2                      |                    | 33       |
|                                               |                        |                        |                        |                        |                        |                        |                        | 3                      | 4                      | 11                     | 2                      |                    | 34       |
|                                               |                        |                        |                        |                        |                        |                        |                        | 5                      | 1                      | 8                      | 3                      |                    | 35       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        | 4                      |                        | 2                      |                    | 36       |
|                                               |                        |                        |                        |                        |                        |                        |                        | 3                      | 3                      | 2                      |                        |                    | 37       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        | 3                      | 3                      | 2                      |                    | 38       |
|                                               |                        |                        |                        |                        |                        |                        |                        | 1                      | 3                      | 6                      | 2                      |                    | 39       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        | 4                      | 2                      | 8                      |                    | 40       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        | 6                      | 4                      | 13                     | 2                  | 41       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        | 6                      | 7                      | 14                     | 4                  | 42       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        | 6                      | 4                      | 14                     | 5                  | 43       |

TABLE D.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—BESSEMER

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
|          | Vessel men's helpers: Pittsburgh—           |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 1        | 6 plants.....                               | 1913  | 34                   | 52.2                              | \$0.531                         | \$27.67                            | 18                                             | 12                   |                 |    | 4                    |    |                      |    |
| 2        |                                             | 1914  | 34                   | 51.9                              | .347                            | 17.73                              | 18                                             | 12                   |                 |    | 4                    |    |                      |    |
| 3        | 7 plants.....                               | 1914  | 37                   | 52.3                              | .345                            | 17.75                              | 18                                             | 12                   | 3               |    | 4                    |    |                      |    |
| 4        |                                             | 1915  | 34                   | 53.0                              | .383                            | 20.16                              | 15                                             | 15                   |                 |    |                      | 4  |                      |    |
| 5        | G. L. and M. W.—                            | 1913  | 19                   | 63.8                              | .523                            | 31.80                              |                                                | 9                    |                 |    |                      | 6  | 4                    |    |
| 6        | 4 plants.....                               | 1914  | 17                   | 59.8                              | .321                            | 19.47                              |                                                | 9                    |                 |    |                      | 8  |                      |    |
| 7        | 5 plants.....                               | 1914  | 20                   | 58.1                              | .338                            | 19.67                              | 3                                              | 9                    |                 |    |                      | 8  |                      |    |
| 8        |                                             | 1915  | 22                   | 59.3                              | .383                            | 22.77                              | 3                                              | 9                    |                 |    |                      | 10 |                      |    |
| 9        | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 10       | 10 plants.....                              | 1913  | 53                   | 56.4                              | .528                            | 29.15                              | 18                                             | 21                   |                 |    | 4                    | 6  | 4                    |    |
|          |                                             | 1914  | 51                   | 54.6                              | .338                            | 18.31                              | 18                                             | 21                   |                 |    | 4                    | 8  |                      |    |
| 11       | 12 plants.....                              | 1914  | 57                   | 54.3                              | .342                            | 18.42                              | 21                                             | 21                   | 3               |    | 4                    | 8  |                      |    |
| 12       |                                             | 1915  | 56                   | 55.5                              | .383                            | 21.18                              | 18                                             | 24                   |                 |    |                      | 14 |                      |    |
|          | Cinder pitmen: Pittsburgh—                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 13       | 4 plants.....                               | 1913  | 71                   | 65.4                              | .232                            | 14.78                              | 21                                             |                      |                 |    |                      | 26 | 24                   |    |
| 14       |                                             | 1914  | 34                   | 72.0                              | .214                            | 15.38                              |                                                |                      |                 |    | 12                   | 18 | 4                    |    |
| 15       | 5 plants.....                               | 1914  | 40                   | 71.9                              | .214                            | 15.37                              |                                                |                      |                 |    | 18                   | 18 | 4                    |    |
| 16       |                                             | 1915  | 36                   | 72.0                              | .212                            | 15.24                              |                                                |                      |                 |    | 6                    | 28 | 4                    |    |
| 17       | G. L. and M. W.—                            | 1913  | 28                   | 73.8                              | .213                            | 15.64                              |                                                |                      |                 |    |                      | 18 | 10                   |    |
| 18       | 4 plants.....                               | 1914  | 12                   | 72.0                              | .210                            | 15.08                              |                                                |                      |                 |    |                      | 12 |                      |    |
| 19       |                                             | 1915  | 12                   | 72.0                              | .222                            | 15.97                              |                                                |                      |                 |    |                      | 12 |                      |    |
| 20       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 21       | 8 plants.....                               | 1913  | 99                   | 67.8                              | .227                            | 15.02                              | 21                                             |                      |                 |    |                      | 44 | 34                   |    |
|          |                                             | 1914  | 46                   | 72.0                              | .213                            | 15.30                              |                                                |                      |                 |    | 12                   | 30 | 4                    |    |
| 22       | 9 plants.....                               | 1914  | 52                   | 71.9                              | .213                            | 15.30                              |                                                |                      |                 |    | 18                   | 30 | 4                    |    |
| 23       |                                             | 1915  | 48                   | 72.0                              | .214                            | 15.42                              |                                                |                      |                 |    | 6                    | 38 | 4                    |    |
|          | Bottom makers: Pittsburgh—                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 24       | 6 plants.....                               | 1913  | 12                   | 73.9                              | .416                            | 30.42                              |                                                |                      |                 |    | 4                    | 4  | 2                    | 2  |
| 25       |                                             | 1914  | 12                   | 73.8                              | .272                            | 19.99                              |                                                |                      |                 |    | 4                    | 4  | 2                    | 2  |
| 26       | 7 plants.....                               | 1914  | 14                   | 73.5                              | .271                            | 19.87                              |                                                |                      |                 |    | 4                    | 6  | 2                    | 2  |
| 27       |                                             | 1915  | 14                   | 73.6                              | .329                            | 23.89                              |                                                |                      |                 |    | 4                    | 6  | 2                    | 2  |
| 28       | G. L. and M. W.—                            | 1913  | 7                    | 73.7                              | .335                            | 24.54                              |                                                |                      |                 |    |                      | 5  | 2                    |    |
| 29       | 4 plants.....                               | 1914  | 6                    | 72.0                              | .343                            | 24.70                              |                                                |                      |                 |    |                      | 6  |                      |    |
| 30       | 5 plants.....                               | 1914  | 8                    | 72.0                              | .332                            | 23.90                              |                                                |                      |                 |    |                      | 8  |                      |    |
| 31       |                                             | 1915  | 8                    | 72.0                              | .337                            | 24.26                              |                                                |                      |                 |    |                      | 8  |                      |    |
| 32       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 33       | 10 plants.....                              | 1913  | 19                   | 73.8                              | .386                            | 28.25                              |                                                |                      |                 |    | 4                    | 9  | 4                    | 2  |
|          |                                             | 1914  | 18                   | 73.2                              | .295                            | 21.56                              |                                                |                      |                 |    | 4                    | 10 | 2                    | 2  |
| 34       | 12 plants.....                              | 1914  | 22                   | 73.0                              | .293                            | 21.34                              |                                                |                      |                 |    | 4                    | 14 | 2                    | 2  |
| 35       |                                             | 1915  | 22                   | 73.0                              | .332                            | 24.02                              |                                                |                      |                 |    | 4                    | 14 | 2                    | 2  |
|          | Bottom makers' helpers: Pittsburgh—         |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 36       | 6 plants.....                               | 1913  | 26                   | 72.8                              | .258                            | 18.74                              |                                                |                      |                 |    | 12                   | 8  | 4                    | 2  |
| 37       |                                             | 1914  | 24                   | 72.7                              | .214                            | 15.52                              |                                                |                      |                 |    | 12                   | 6  | 4                    | 2  |
| 38       | 7 plants.....                               | 1914  | 26                   | 72.6                              | .213                            | 15.44                              |                                                |                      |                 |    | 12                   | 8  | 4                    | 2  |
| 39       |                                             | 1915  | 24                   | 73.0                              | .235                            | 17.02                              |                                                |                      |                 |    | 6                    | 12 | 4                    | 2  |



AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
 CONVERTERS—Continued.

| Employees whose rates of wages per hour were— |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | Line<br>No. |
|-----------------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|--------------------------|-------------|
| 9 and<br>under<br>10<br>cents.                | 10<br>and<br>under<br>12<br>cents. | 12<br>and<br>under<br>14<br>cents. | 14<br>and<br>under<br>16<br>cents. | 16<br>and<br>under<br>18<br>cents. | 18<br>and<br>under<br>20<br>cents. | 20<br>and<br>under<br>25<br>cents. | 25<br>and<br>under<br>30<br>cents. | 30<br>and<br>under<br>40<br>cents. | 40<br>and<br>under<br>50<br>cents. | 50<br>and<br>under<br>60<br>cents. | 60<br>and<br>under<br>70<br>cents. | 70 cents<br>and<br>over. |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 3                                  | 16                                 | 3                                  | 6                                  | 6                        | 1           |
|                                               |                                    |                                    |                                    |                                    |                                    | 6                                  | 7                                  | 11                                 | 9                                  | 1                                  |                                    |                          | 2           |
|                                               |                                    |                                    |                                    |                                    |                                    | 6                                  | 7                                  | 14                                 | 9                                  | 1                                  |                                    |                          | 3           |
|                                               |                                    |                                    |                                    | 1                                  | 2                                  | 3                                  | 1                                  | 15                                 | 5                                  | 5                                  | 2                                  |                          | 4           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 6                                  | 2                                  | 6                                  | 2                                  | 3                        | 5           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 7                                  | 8                                  |                                    |                                    |                                    |                          | 6           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 7                                  | 9                                  | 4                                  |                                    |                                    |                          | 7           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 12                                 | 7                                  | 2                                  |                                    |                          | 8           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 9                                  | 18                                 | 9                                  | 8                                  | 9                        | 9           |
|                                               |                                    |                                    |                                    |                                    |                                    | 6                                  | 14                                 | 19                                 | 11                                 | 1                                  |                                    |                          | 10          |
|                                               |                                    |                                    |                                    |                                    |                                    | 6                                  | 14                                 | 23                                 | 13                                 | 1                                  |                                    |                          | 11          |
|                                               |                                    |                                    |                                    | 1                                  | 2                                  | 3                                  | 2                                  | 27                                 | 12                                 | 7                                  | 2                                  |                          | 12          |
|                                               |                                    |                                    |                                    |                                    |                                    | 50                                 | 14                                 | 7                                  |                                    |                                    |                                    |                          | 13          |
|                                               |                                    |                                    |                                    |                                    |                                    | 34                                 |                                    |                                    |                                    |                                    |                                    |                          | 14          |
|                                               |                                    |                                    |                                    |                                    |                                    | 40                                 |                                    |                                    |                                    |                                    |                                    |                          | 15          |
|                                               |                                    |                                    |                                    |                                    | 10                                 | 26                                 |                                    |                                    |                                    |                                    |                                    |                          | 16          |
|                                               |                                    |                                    |                                    |                                    | 10                                 | 14                                 | 4                                  |                                    |                                    |                                    |                                    |                          | 17          |
|                                               |                                    |                                    |                                    |                                    | 4                                  | 8                                  | 4                                  |                                    |                                    |                                    |                                    |                          | 18          |
|                                               |                                    |                                    |                                    | 2                                  | 2                                  | 4                                  | 4                                  |                                    |                                    |                                    |                                    |                          | 19          |
|                                               |                                    |                                    |                                    |                                    | 10                                 | 64                                 | 18                                 | 7                                  |                                    |                                    |                                    |                          | 20          |
|                                               |                                    |                                    |                                    |                                    | 4                                  | 42                                 |                                    |                                    |                                    |                                    |                                    |                          | 21          |
|                                               |                                    |                                    |                                    |                                    | 4                                  | 48                                 |                                    |                                    |                                    |                                    |                                    |                          | 22          |
|                                               |                                    |                                    |                                    | 2                                  | 12                                 | 30                                 | 4                                  |                                    |                                    |                                    |                                    |                          | 23          |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    | 4                                  | 4                                  |                                    | 2                                  |                          | 24          |
|                                               |                                    |                                    |                                    |                                    | 2                                  | 6                                  |                                    | 3                                  | 1                                  |                                    |                                    |                          | 25          |
|                                               |                                    |                                    |                                    |                                    | 2                                  | 2                                  | 2                                  | 8                                  |                                    | 2                                  |                                    |                          | 26          |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    | 3                                  | 2                                  |                                    |                                    |                          | 27          |
|                                               |                                    |                                    |                                    |                                    |                                    | 1                                  | 2                                  | 2                                  | 1                                  |                                    |                                    |                          | 28          |
|                                               |                                    |                                    |                                    |                                    |                                    | 1                                  | 3                                  | 3                                  | 1                                  |                                    |                                    |                          | 29          |
|                                               |                                    |                                    |                                    |                                    |                                    | 1                                  | 3                                  | 2                                  | 2                                  |                                    |                                    |                          | 30          |
|                                               |                                    |                                    |                                    |                                    |                                    | 4                                  |                                    | 7                                  | 6                                  |                                    | 2                                  |                          | 31          |
|                                               |                                    |                                    |                                    |                                    | 2                                  | 7                                  | 2                                  | 5                                  | 2                                  |                                    |                                    |                          | 32          |
|                                               |                                    |                                    |                                    |                                    | 2                                  | 7                                  | 5                                  | 6                                  | 2                                  |                                    |                                    |                          | 33          |
|                                               |                                    |                                    |                                    | 2                                  |                                    | 3                                  | 3                                  | 10                                 | 2                                  | 2                                  |                                    |                          | 34          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | 35          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          |             |
|                                               |                                    |                                    |                                    |                                    | 8                                  | 8                                  | 2                                  | 6                                  | 2                                  |                                    |                                    |                          | 36          |
|                                               |                                    |                                    |                                    | 2                                  | 2                                  | 16                                 | 4                                  |                                    |                                    |                                    |                                    |                          | 37          |
|                                               |                                    |                                    |                                    | 2                                  |                                    | 3                                  | 17                                 | 4                                  |                                    |                                    |                                    |                          | 38          |
|                                               |                                    |                                    |                                    |                                    | 6                                  | 6                                  | 6                                  | 3                                  | 1                                  |                                    |                                    |                          | 39          |

TABLE D.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—BESSEMER

| Line No. | Occupation, district, and number of plants.                            | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |       |                      |    |                      |       |
|----------|------------------------------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-------|----------------------|----|----------------------|-------|
|          |                                                                        |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60    | Over 60 and under 72 | 72 | Over 72 and under 84 | 84    |
| 1        | Bottom makers' helpers—Concluded.<br>G. L. and M. W.—<br>4 plants..... | 1913  | 14                   | 73.7                              | \$0.250                         | \$18.31                            | .....                                          | .....                | .....           | ..... | .....                | 10 | 4                    | ..... |
| 2        |                                                                        | 1914  | 9                    | 72.0                              | .259                            | 18.66                              | .....                                          | .....                | .....           | ..... | .....                | 9  | .....                | ..... |
| 3        | 5 plants.....                                                          | 1914  | 13                   | 72.0                              | .250                            | 17.97                              | .....                                          | .....                | .....           | ..... | .....                | 13 | .....                | ..... |
| 4        |                                                                        | 1915  | 14                   | 72.0                              | .247                            | 17.76                              | .....                                          | .....                | .....           | ..... | .....                | 14 | .....                | ..... |
| 5        | Total—<br>10 plants.....                                               | 1913  | 40                   | 73.1                              | .255                            | 18.59                              | .....                                          | .....                | .....           | ..... | 12                   | 18 | 8                    | 2     |
| 6        |                                                                        | 1914  | 33                   | 72.5                              | .226                            | 16.38                              | .....                                          | .....                | .....           | ..... | 12                   | 15 | 4                    | 2     |
| 7        | 12 plants.....                                                         | 1914  | 39                   | 72.4                              | .225                            | 16.29                              | .....                                          | .....                | .....           | ..... | 12                   | 21 | 4                    | 2     |
| 8        |                                                                        | 1915  | 38                   | 72.6                              | .239                            | 17.30                              | .....                                          | .....                | .....           | ..... | 6                    | 26 | 4                    | 2     |
| 9        | Ladle liners:<br>Pittsburgh—<br>6 plants.....                          | 1913  | 12                   | 71.9                              | .404                            | 29.04                              | .....                                          | .....                | .....           | ..... | 4                    | 6  | 2                    | ..... |
| 10       |                                                                        | 1914  | 12                   | 71.8                              | .274                            | 19.69                              | .....                                          | .....                | .....           | ..... | 4                    | 6  | 2                    | ..... |
| 11       | 7 plants.....                                                          | 1914  | 14                   | 71.8                              | .271                            | 19.49                              | .....                                          | .....                | .....           | ..... | 4                    | 8  | 2                    | ..... |
| 12       |                                                                        | 1915  | 14                   | 71.9                              | .308                            | 22.16                              | .....                                          | .....                | .....           | ..... | 4                    | 8  | 2                    | ..... |
| 13       | G. L. and M. W.—<br>4 plants.....                                      | 1913  | 10                   | 64.8                              | .434                            | 27.22                              | 3                                              | .....                | .....           | 1     | .....                | 4  | 2                    | ..... |
| 14       |                                                                        | 1914  | 9                    | 63.0                              | .343                            | 21.70                              | .....                                          | 3                    | .....           | 1     | .....                | 5  | .....                | ..... |
| 15       | 5 plants.....                                                          | 1914  | 11                   | 64.6                              | .345                            | 22.42                              | .....                                          | 3                    | .....           | 1     | .....                | 7  | .....                | ..... |
| 16       |                                                                        | 1915  | 12                   | 65.3                              | .385                            | 24.99                              | .....                                          | 3                    | .....           | 1     | .....                | 8  | .....                | ..... |
| 17       | Total—<br>10 plants.....                                               | 1913  | 22                   | 68.7                              | .418                            | 28.22                              | 3                                              | .....                | .....           | 1     | 4                    | 10 | 4                    | ..... |
| 18       |                                                                        | 1914  | 21                   | 68.0                              | .304                            | 20.55                              | .....                                          | 3                    | .....           | 1     | 4                    | 11 | 2                    | ..... |
| 19       | 12 plants.....                                                         | 1914  | 25                   | 68.6                              | .304                            | 20.77                              | .....                                          | 3                    | .....           | 1     | 4                    | 15 | 2                    | ..... |
| 20       |                                                                        | 1915  | 26                   | 68.8                              | .344                            | 23.47                              | .....                                          | 3                    | .....           | 1     | 4                    | 16 | 2                    | ..... |
| 21       | Ladle liners' helpers:<br>Pittsburgh—<br>6 plants.....                 | 1913  | 24                   | 71.8                              | .243                            | 17.46                              | .....                                          | .....                | .....           | ..... | 14                   | 6  | 4                    | ..... |
| 22       |                                                                        | 1914  | 22                   | 71.3                              | .218                            | 15.56                              | .....                                          | .....                | .....           | ..... | 14                   | 6  | 2                    | ..... |
| 23       | 7 plants.....                                                          | 1914  | 24                   | 71.3                              | .218                            | 15.57                              | .....                                          | .....                | .....           | ..... | 14                   | 8  | 2                    | ..... |
| 24       |                                                                        | 1915  | 22                   | 71.8                              | .226                            | 16.18                              | .....                                          | .....                | .....           | ..... | 8                    | 12 | 2                    | ..... |
| 25       | G. L. and M. W.—<br>3 plants.....                                      | 1913  | 14                   | 69.4                              | .253                            | 16.45                              | 3                                              | .....                | .....           | 1     | .....                | 2  | 8                    | ..... |
| 26       |                                                                        | 1914  | 8                    | 61.9                              | .243                            | 14.68                              | .....                                          | 3                    | .....           | 1     | .....                | 4  | .....                | ..... |
| 27       | 4 plants.....                                                          | 1914  | 10                   | 63.9                              | .232                            | 14.45                              | .....                                          | 3                    | .....           | 1     | .....                | 6  | .....                | ..... |
| 28       |                                                                        | 1915  | 12                   | 65.3                              | .247                            | 15.42                              | .....                                          | 3                    | .....           | 1     | .....                | 8  | .....                | ..... |
| 29       | Total—<br>9 plants.....                                                | 1913  | 38                   | 70.9                              | .247                            | 17.09                              | 3                                              | .....                | .....           | 1     | 14                   | 8  | 12                   | ..... |
| 30       |                                                                        | 1914  | 30                   | 68.8                              | .225                            | 15.32                              | .....                                          | 3                    | .....           | 1     | 14                   | 10 | 2                    | ..... |
| 31       | 11 plants.....                                                         | 1914  | 34                   | 69.1                              | .222                            | 15.24                              | .....                                          | 3                    | .....           | 1     | 14                   | 14 | 2                    | ..... |
| 32       |                                                                        | 1915  | 34                   | 69.5                              | .233                            | 15.91                              | .....                                          | 3                    | .....           | 1     | 8                    | 20 | 2                    | ..... |
| 33       | Stopper makers:<br>Pittsburgh—<br>6 plants.....                        | 1913  | 6                    | 69.7                              | .280                            | 19.31                              | .....                                          | .....                | .....           | 1     | 1                    | 4  | .....                | ..... |
| 34       |                                                                        | 1914  | 6                    | 68.8                              | .239                            | 16.35                              | .....                                          | .....                | .....           | 1     | 2                    | 3  | .....                | ..... |
| 35       | 7 plants.....                                                          | 1914  | 7                    | 69.0                              | .239                            | 16.41                              | .....                                          | .....                | .....           | 1     | 3                    | 3  | .....                | ..... |
| 36       |                                                                        | 1915  | 7                    | 68.0                              | .254                            | 16.94                              | .....                                          | .....                | .....           | 2     | 1                    | 4  | .....                | ..... |
| 37       | G. L. and M. W.—<br>4 plants.....                                      | 1913  | 4                    | 72.0                              | .336                            | 24.16                              | .....                                          | .....                | .....           | ..... | .....                | 4  | .....                | ..... |
| 38       |                                                                        | 1914  | 4                    | 71.8                              | .274                            | 19.66                              | .....                                          | .....                | .....           | ..... | 1                    | 3  | .....                | ..... |
| 39       | 5 plants.....                                                          | 1914  | 5                    | 71.8                              | .268                            | 19.27                              | .....                                          | .....                | .....           | ..... | 1                    | 4  | .....                | ..... |
| 40       |                                                                        | 1915  | 5                    | 72.0                              | .275                            | 19.80                              | .....                                          | .....                | .....           | ..... | .....                | 5  | .....                | ..... |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
*CONVERTERS*—Continued.

| Employees whose rates of wages per hour were— |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    | Line No. |
|-----------------------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|--------------------|----------|
| 9 and under 10 cents.                         | 10 and under 12 cents. | 12 and under 14 cents. | 14 and under 16 cents. | 16 and under 18 cents. | 18 and under 20 cents. | 20 and under 25 cents. | 25 and under 30 cents. | 30 and under 40 cents. | 40 and under 50 cents. | 50 and under 60 cents. | 60 and under 70 cents. | 70 cents and over. |          |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        | 2                      |                        | 7                      | 3                      |                        | 2                      |                        |                        |                    | 1        |
|                                               |                        |                        |                        |                        |                        | 6                      |                        | 3                      |                        |                        |                        |                    | 2        |
|                                               |                        |                        |                        |                        | 2                      | 6                      | 2                      | 3                      |                        |                        |                        |                    | 3        |
|                                               |                        |                        |                        | 2                      | 2                      | 6                      | 2                      | 1                      | 1                      |                        |                        |                    | 4        |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        | 2                      | 8                      | 15                     | 5                      | 6                      | 4                      |                        |                        |                    | 5        |
|                                               |                        |                        | 2                      | 2                      | 2                      | 22                     | 4                      | 3                      |                        |                        |                        |                    | 6        |
|                                               |                        |                        |                        | 2                      | 5                      | 23                     | 6                      | 3                      |                        |                        |                        |                    | 7        |
|                                               |                        | 2                      |                        | 2                      | 8                      | 12                     | 8                      | 4                      | 2                      |                        |                        |                    | 8        |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        |                        |                        | 2                      |                        | 2                      | 6                      | 2                      |                        |                    | 9        |
|                                               |                        |                        |                        |                        |                        | 4                      | 5                      | 3                      |                        |                        |                        |                    | 10       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        |                        | 2                      | 4                      | 7                      | 3                      |                        |                        |                        |                    | 11       |
|                                               |                        |                        |                        |                        |                        |                        | 4                      | 6                      | 2                      |                        |                        |                    | 12       |
|                                               |                        |                        |                        |                        |                        |                        | 2                      | 2                      | 1                      | 5                      |                        |                    | 13       |
|                                               |                        |                        |                        |                        |                        |                        | 3                      | 3                      | 3                      |                        |                        |                    | 14       |
|                                               |                        |                        |                        |                        |                        |                        | 3                      | 5                      | 3                      |                        |                        |                    | 15       |
|                                               |                        |                        |                        |                        |                        |                        | 2                      | 7                      | 1                      | 2                      |                        |                    | 16       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        |                        |                        | 2                      | 2                      | 4                      | 7                      | 7                      |                        |                    | 17       |
|                                               |                        |                        |                        |                        |                        | 4                      | 8                      | 6                      | 3                      |                        |                        |                    | 18       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        |                        | 2                      | 4                      | 10                     | 8                      | 3                      |                        |                        |                    | 19       |
|                                               |                        |                        |                        |                        |                        |                        | 6                      | 13                     | 3                      | 2                      |                        |                    | 20       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        |                        | 8                      | 12                     |                        | 2                      | 2                      |                        |                        |                    | 21       |
|                                               |                        |                        |                        | 2                      | 2                      | 16                     | 2                      |                        |                        |                        |                        |                    | 22       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        | 1                      | 2                      | 2                      | 18                     | 2                      |                        |                        |                        |                        |                    | 23       |
|                                               |                        |                        |                        | 1                      | 6                      | 9                      | 4                      | 1                      |                        |                        |                        |                    | 24       |
|                                               |                        |                        |                        |                        | 6                      | 4                      | 1                      |                        | 3                      |                        |                        |                    | 25       |
|                                               |                        |                        |                        |                        | 1                      | 3                      | 4                      |                        |                        |                        |                        |                    | 26       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        |                        | 3                      | 3                      | 4                      |                        |                        |                        |                        |                    | 27       |
|                                               |                        |                        |                        |                        | 4                      | 4                      | 1                      | 3                      |                        |                        |                        |                    | 28       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        |                        | 14                     | 16                     | 1                      | 2                      | 5                      |                        |                        |                    | 29       |
|                                               |                        |                        |                        | 2                      | 3                      | 19                     | 6                      |                        |                        |                        |                        |                    | 30       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        | 2                      | 5                      | 21                     | 6                      |                        |                        |                        |                        |                    | 31       |
|                                               |                        |                        | 1                      | 1                      | 10                     | 13                     | 5                      | 4                      |                        |                        |                        |                    | 32       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        |                        |                        | 3                      | 1                      | 2                      |                        |                        |                        |                    | 33       |
|                                               |                        |                        |                        |                        | 1                      | 3                      | 1                      | 1                      |                        |                        |                        |                    | 34       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        |                        | 1                      | 4                      | 1                      | 1                      |                        |                        |                        |                    | 35       |
|                                               |                        |                        |                        | 1                      |                        | 4                      |                        | 2                      |                        |                        |                        |                    | 36       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        |                        |                        | 1                      | 1                      | 1                      | 1                      |                        |                        |                    | 37       |
|                                               |                        |                        |                        |                        |                        | 2                      | 1                      | 1                      |                        |                        |                        |                    | 38       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        |                        |                        | 3                      | 1                      | 1                      |                        |                        |                        |                    | 39       |
|                                               |                        |                        |                        |                        |                        | 3                      | 1                      | 1                      |                        |                        |                        |                    | 40       |

TABLE D.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—BESSEMER

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
|          | Stopper makers—Con.                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 1        | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 2        | 10 plants.....                              | 1913  | 10                   | 70.6                              | \$0.302                         | \$21.25                            |                                                |                      |                 | 1  | 1                    | 8  |                      |    |
|          |                                             | 1914  | 10                   | 70.0                              | .253                            | 17.67                              |                                                |                      |                 | 1  | 3                    | 6  |                      |    |
| 3        | 12 plants.....                              | 1914  | 12                   | 70.2                              | .251                            | 17.60                              |                                                |                      |                 | 1  | 4                    | 7  |                      |    |
| 4        |                                             | 1915  | 12                   | 69.7                              | .263                            | 18.13                              |                                                |                      |                 | 2  | 1                    | 9  |                      |    |
|          | Stopper setters:                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 5        | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 6        | 6 plants.....                               | 1913  | 31                   | 47.9                              | .534                            | 25.61                              | 31                                             |                      |                 |    |                      |    |                      |    |
|          |                                             | 1914  | 27                   | 47.8                              | .368                            | 17.59                              | 24                                             | 3                    |                 |    |                      |    |                      |    |
| 7        | 7 plants.....                               | 1914  | 30                   | 47.8                              | .365                            | 17.43                              | 27                                             | 3                    |                 |    |                      |    |                      |    |
| 8        |                                             | 1915  | 30                   | 47.9                              | .397                            | 19.05                              | 27                                             | 3                    |                 |    |                      |    |                      |    |
| 9        | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 10       | 4 plants.....                               | 1913  | 12                   | 61.0                              | .600                            | 34.21                              | 6                                              |                      |                 |    |                      | 4  | 2                    |    |
|          |                                             | 1914  | 11                   | 59.5                              | .349                            | 21.02                              |                                                | 6                    |                 |    |                      | 5  |                      |    |
| 11       | 5 plants.....                               | 1914  | 14                   | 57.0                              | .398                            | 22.46                              | 3                                              | 6                    |                 |    |                      | 5  |                      |    |
| 12       |                                             | 1915  | 12                   | 60.3                              | .488                            | 28.52                              | 3                                              | 3                    |                 |    |                      | 6  |                      |    |
|          | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 13       | 10 plants.....                              | 1913  | 43                   | 51.6                              | .553                            | 28.01                              | 37                                             |                      |                 |    |                      | 4  | 2                    |    |
| 14       |                                             | 1914  | 38                   | 51.2                              | .363                            | 18.58                              | 24                                             | 9                    |                 |    |                      | 5  |                      |    |
| 15       | 12 plants.....                              | 1914  | 44                   | 50.7                              | .376                            | 19.03                              | 30                                             | 9                    |                 |    |                      | 5  |                      |    |
| 16       |                                             | 1915  | 42                   | 51.5                              | .423                            | 21.76                              | 30                                             | 6                    |                 |    |                      | 6  |                      |    |
|          | Steel pourers:                              |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 17       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 18       | 6 plants.....                               | 1913  | 18                   | 47.9                              | .737                            | 35.27                              | 18                                             |                      |                 |    |                      |    |                      |    |
|          |                                             | 1914  | 18                   | 47.7                              | .473                            | 22.54                              | 15                                             | 3                    |                 |    |                      |    |                      |    |
| 19       | 7 plants.....                               | 1914  | 21                   | 47.7                              | .468                            | 22.34                              | 18                                             | 3                    |                 |    |                      |    |                      |    |
| 20       |                                             | 1915  | 21                   | 47.9                              | .530                            | 25.37                              | 18                                             | 3                    |                 |    |                      |    |                      |    |
| 21       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 22       | 4 plants.....                               | 1913  | 16                   | 64.5                              | .531                            | 33.40                              | 6                                              |                      |                 |    |                      | 6  | 4                    |    |
|          |                                             | 1914  | 13                   | 61.4                              | .369                            | 23.93                              |                                                | 6                    |                 |    |                      | 7  |                      |    |
| 23       | 5 plants.....                               | 1914  | 16                   | 58.9                              | .412                            | 24.83                              | 3                                              | 6                    |                 |    |                      | 7  |                      |    |
| 24       |                                             | 1915  | 14                   | 61.9                              | .518                            | 31.84                              | 3                                              | 3                    |                 |    |                      | 8  |                      |    |
|          | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 25       | 10 plants.....                              | 1913  | 34                   | 55.7                              | .640                            | 34.39                              | 24                                             |                      |                 |    |                      | 6  | 4                    |    |
| 26       |                                             | 1914  | 31                   | 53.4                              | .429                            | 23.12                              | 15                                             | 9                    |                 |    |                      | 7  |                      |    |
| 27       | 12 plants.....                              | 1914  | 37                   | 52.5                              | .444                            | 23.42                              | 21                                             | 9                    |                 |    |                      | 7  |                      |    |
| 28       |                                             | 1915  | 35                   | 53.5                              | .525                            | 27.96                              | 21                                             | 6                    |                 |    |                      | 8  |                      |    |
|          | Mold cappers:                               |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 29       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 30       | 5 plants.....                               | 1913  | 35                   | 49.3                              | .431                            | 21.00                              | 33                                             |                      |                 |    |                      | 2  |                      |    |
|          |                                             | 1914  | 20                   | 50.1                              | .265                            | 13.11                              | 15                                             | 3                    |                 |    |                      | 2  |                      |    |
| 31       | 6 plants.....                               | 1914  | 24                   | 53.8                              | .259                            | 13.68                              | 15                                             | 3                    |                 |    |                      | 6  |                      |    |
| 32       |                                             | 1915  | 24                   | 53.5                              | .303                            | 15.73                              | 15                                             | 3                    |                 |    | 4                    | 2  |                      |    |
| 33       | G. L. & M. W.—                              |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 34       | 3 plants.....                               | 1913  | 16                   | 73.5                              | .275                            | 20.06                              |                                                |                      |                 |    |                      | 12 | 4                    |    |
|          |                                             | 1914  | 11                   | 72.0                              | .271                            | 19.49                              |                                                |                      |                 |    |                      | 11 |                      |    |
| 35       | 4 plants.....                               | 1914  | 15                   | 72.0                              | .262                            | 18.85                              |                                                |                      |                 |    |                      | 15 |                      |    |
| 36       |                                             | 1915  | 16                   | 72.0                              | .281                            | 20.23                              |                                                |                      |                 |    |                      | 16 |                      |    |
|          | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 37       | 8 plants.....                               | 1913  | 51                   | 56.9                              | .382                            | 20.71                              | 33                                             |                      |                 |    |                      | 14 | 4                    |    |
| 38       |                                             | 1914  | 31                   | 57.9                              | .267                            | 15.37                              | 15                                             | 3                    |                 |    |                      | 13 |                      |    |
| 39       | 10 plants.....                              | 1914  | 39                   | 60.8                              | .260                            | 15.67                              | 15                                             | 3                    |                 |    |                      | 21 |                      |    |
| 40       |                                             | 1915  | 40                   | 60.9                              | .294                            | 17.53                              | 15                                             | 3                    |                 |    | 4                    | 18 |                      |    |



TABLE D.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, 1913 TO 1915—*BESSEMER*

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |     |                      |     |                      |    |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-----|----------------------|-----|----------------------|----|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60  | Over 60 and under 72 | 72  | Over 72 and under 84 | 84 |
|          | Ingot strippers: Pittsburgh—                |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |    |
| 1        | 6 plants.....                               | 1913  | 16                   | 66.0                              | \$0.364                         | \$23.23                            |                                                | 6                    |                 | 2   | 2                    | 6   |                      |    |
| 2        |                                             | 1914  | 15                   | 69.9                              | .324                            | 21.95                              |                                                | 3                    |                 | 2   | 2                    | 6   | 2                    |    |
| 3        | 7 plants.....                               | 1914  | 18                   | 66.2                              | .326                            | 20.98                              | 3                                              | 3                    |                 | 2   | 2                    | 6   | 2                    |    |
| 4        |                                             | 1915  | 18                   | 65.8                              | .347                            | 22.10                              | 3                                              | 3                    |                 |     | 4                    | 8   |                      |    |
| 5        | G. L. & M. W.—                              | 1913  | 12                   | 75.0                              | .296                            | 22.24                              |                                                |                      |                 |     | 4                    | 8   |                      |    |
| 6        | 4 plants.....                               | 1914  | 8                    | 72.4                              | .267                            | 19.30                              |                                                |                      |                 |     | 6                    | 2   | 2                    |    |
| 7        | 5 plants.....                               | 1914  | 11                   | 65.7                              | .291                            | 18.70                              | 3                                              |                      |                 |     |                      | 6   | 2                    |    |
| 8        |                                             | 1915  | 13                   | 66.7                              | .310                            | 20.40                              | 3                                              |                      |                 |     |                      | 8   | 2                    |    |
| 9        | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |    |
| 10       | 10 plants.....                              | 1913  | 28                   | 69.9                              | .334                            | 22.81                              |                                                | 6                    |                 | 2   | 6                    | 14  |                      |    |
|          |                                             | 1914  | 23                   | 70.7                              | .304                            | 21.03                              |                                                | 3                    |                 | 2   | 8                    | 8   | 2                    |    |
| 11       | 12 plants.....                              | 1914  | 29                   | 66.0                              | .313                            | 20.11                              | 6                                              | 3                    |                 | 2   | 8                    | 8   | 2                    |    |
| 12       |                                             | 1915  | 31                   | 66.2                              | .332                            | 21.39                              | 6                                              | 3                    |                 |     | 12                   | 10  |                      |    |
|          | Laborers: Pittsburgh—                       |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |    |
| 13       | 6 plants.....                               | 1913  | 445                  | 75.4                              | .192                            | 14.53                              |                                                |                      | 5               | 38  | 121                  | 172 | 109                  |    |
| 14       |                                             | 1914  | 372                  | 76.6                              | .192                            | 14.72                              |                                                |                      |                 | 29  | 142                  | 70  | 131                  |    |
| 15       | 7 plants.....                               | 1914  | 427                  | 74.7                              | .193                            | 14.42                              |                                                |                      | 39              | 45  | 142                  | 70  | 131                  |    |
| 16       |                                             | 1915  | 400                  | 74.9                              | .193                            | 14.47                              |                                                |                      | 36              | 46  | 133                  | 47  | 138                  |    |
| 17       | G. L. & M. W.—                              | 1913  | 130                  | 74.5                              | .190                            | 14.09                              |                                                | 1                    |                 | 6   | 86                   | 15  | 22                   |    |
| 18       | 4 plants.....                               | 1914  | 78                   | 71.7                              | .193                            | 13.85                              |                                                | 2                    |                 |     | 73                   | 3   |                      |    |
| 19       | 5 plants.....                               | 1914  | 119                  | 71.8                              | .191                            | 13.74                              |                                                |                      | 2               |     | 114                  | 3   |                      |    |
| 20       |                                             | 1915  | 96                   | 71.7                              | .191                            | 13.66                              |                                                |                      |                 | 3   | 90                   | 3   |                      |    |
| 21       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |    |
| 22       | 10 plants.....                              | 1913  | 575                  | 75.2                              | .192                            | 14.43                              |                                                | 1                    | 5               | 44  | 207                  | 187 | 131                  |    |
|          |                                             | 1914  | 450                  | 75.7                              | .192                            | 14.57                              |                                                | 2                    | 29              | 215 | 73                   | 131 |                      |    |
| 23       | 12 plants.....                              | 1914  | 546                  | 74.0                              | .193                            | 14.27                              |                                                | 2                    | 39              | 45  | 256                  | 73  | 131                  |    |
| 24       |                                             | 1915  | 496                  | 74.3                              | .193                            | 14.31                              |                                                |                      | 39              | 46  | 223                  | 50  | 138                  |    |
|          | Unclassified—productive: Pittsburgh—        |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |    |
| 25       | 7 plants.....                               | 1914  | 386                  | 69.3                              | .235                            | 15.91                              | 36                                             | 30                   | 1               | 5   | 93                   | 85  | 100                  | 36 |
| 26       |                                             | 1915  | 390                  | 68.6                              | .250                            | 16.73                              | 46                                             | 30                   | 1               | 2   | 65                   | 137 | 82                   | 27 |
| 27       | G. L. & M. W.—                              | 1914  | 266                  | 70.4                              | .239                            | 16.70                              | 3                                              | 21                   |                 | 3   | 196                  | 40  | 3                    |    |
| 28       | 5 plants.....                               | 1915  | 276                  | 71.5                              | .243                            | 17.21                              | 3                                              | 9                    |                 | 5   | 223                  | 30  | 6                    |    |
| 29       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |    |
| 30       | 12 plants.....                              | 1914  | 652                  | 69.7                              | .237                            | 16.23                              | 39                                             | 51                   | 1               | 5   | 96                   | 281 | 140                  | 39 |
|          |                                             | 1915  | 666                  | 69.8                              | .247                            | 16.93                              | 49                                             | 39                   | 1               | 2   | 70                   | 300 | 112                  | 33 |
|          | Unclassified—nonproductive: Pittsburgh—     |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |    |
| 31       | 7 plants.....                               | 1914  | 200                  | 75.0                              | .226                            | 17.00                              |                                                |                      | 39              | 12  | 29                   | 20  | 100                  |    |
| 32       |                                             | 1915  | 204                  | 76.1                              | .227                            | 17.23                              |                                                |                      | 39              | 11  | 30                   | 22  | 102                  |    |
| 33       | G. L. & M. W.—                              | 1914  | 156                  | 68.8                              | .243                            | 16.57                              |                                                |                      | 27              | 13  | 103                  | 1   | 2                    |    |
| 34       | 5 plants.....                               | 1915  | 161                  | 69.4                              | .234                            | 16.23                              |                                                |                      | 28              | 9   | 109                  |     | 7                    |    |
| 35       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |    |
| 36       | 12 plants.....                              | 1914  | 356                  | 72.3                              | .233                            | 16.81                              |                                                |                      | 27              | 52  | 132                  | 21  | 102                  |    |
|          |                                             | 1915  | 365                  | 73.2                              | .230                            | 16.79                              |                                                |                      | 28              | 48  | 139                  | 22  | 109                  |    |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
CONVERTERS—Concluded.

| Employees whose rates of wages per hour were— |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          | Line<br>No. |
|-----------------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|--------------------------|-------------|
| 9 and<br>under<br>10<br>cents.                | 10<br>and<br>under<br>12<br>cents. | 12<br>and<br>under<br>14<br>cents. | 14<br>and<br>under<br>16<br>cents. | 16<br>and<br>under<br>18<br>cents. | 18<br>and<br>under<br>20<br>cents. | 20<br>and<br>under<br>25<br>cents. | 25<br>and<br>under<br>30<br>cents. | 30<br>and<br>under<br>40<br>cents. | 40<br>and<br>under<br>50<br>cents. | 50<br>and<br>under<br>60<br>cents. | 60<br>and<br>under<br>70<br>cents. | 70 cents<br>and<br>over. |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          |             |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  | 8                                  | 1                                  | 8                                  |                                    |                                    |                          | 1           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 8                                  |                                    | 4                                  |                                    |                                    |                          | 2           |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  | 8                                  | 4                                  | 4                                  |                                    |                                    |                          | 3           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 10                                 | 1                                  | 7                                  |                                    |                                    |                          | 4           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 8                                  | 4                                  |                                    |                                    |                                    |                          | 5           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 8                                  |                                    |                                    |                                    |                                    |                          | 6           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 8                                  | 3                                  |                                    |                                    |                                    |                          | 7           |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  | 2                                  | 9                                  |                                    |                                    |                                    |                          | 8           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          |             |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  | 16                                 | 4                                  | 8                                  |                                    |                                    |                          | 9           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 16                                 | 1                                  | 4                                  |                                    |                                    |                          | 10          |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  | 16                                 | 7                                  | 4                                  |                                    |                                    |                          | 11          |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  | 12                                 | 10                                 | 7                                  |                                    |                                    |                          | 12          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          |             |
|                                               |                                    |                                    |                                    | 78                                 | 242                                | 125                                |                                    |                                    |                                    |                                    |                                    |                          | 13          |
|                                               |                                    |                                    |                                    | 69                                 | 236                                | 67                                 |                                    |                                    |                                    |                                    |                                    |                          | 14          |
|                                               |                                    |                                    |                                    | 69                                 | 236                                | 122                                |                                    |                                    |                                    |                                    |                                    |                          | 15          |
|                                               |                                    |                                    |                                    | 60                                 | 241                                | 99                                 |                                    |                                    |                                    |                                    |                                    |                          | 16          |
|                                               |                                    |                                    |                                    | 35                                 | 59                                 | 36                                 |                                    |                                    |                                    |                                    |                                    |                          | 17          |
|                                               |                                    |                                    |                                    | 12                                 | 30                                 | 30                                 |                                    |                                    |                                    |                                    |                                    |                          | 18          |
|                                               |                                    |                                    |                                    | 12                                 | 71                                 | 36                                 |                                    |                                    |                                    |                                    |                                    |                          | 19          |
|                                               |                                    |                                    |                                    | 10                                 | 63                                 | 23                                 |                                    |                                    |                                    |                                    |                                    |                          | 20          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          |             |
|                                               |                                    |                                    |                                    | 113                                | 301                                | 161                                |                                    |                                    |                                    |                                    |                                    |                          | 21          |
|                                               |                                    |                                    |                                    | 81                                 | 266                                | 103                                |                                    |                                    |                                    |                                    |                                    |                          | 22          |
|                                               |                                    |                                    |                                    | 81                                 | 307                                | 158                                |                                    |                                    |                                    |                                    |                                    |                          | 23          |
|                                               |                                    |                                    |                                    | 70                                 | 304                                | 122                                |                                    |                                    |                                    |                                    |                                    |                          | 24          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          |             |
|                                               |                                    |                                    | 12                                 | 14                                 | 33                                 | 194                                | 82                                 | 49                                 | 2                                  |                                    |                                    |                          | 25          |
|                                               |                                    |                                    |                                    | 14                                 | 22                                 | 173                                | 112                                | 57                                 | 9                                  | 2                                  | 1                                  |                          | 26          |
|                                               |                                    |                                    | 2                                  | 5                                  | 31                                 | 135                                | 63                                 | 25                                 | 5                                  |                                    |                                    |                          | 27          |
|                                               |                                    |                                    |                                    | 17                                 | 45                                 | 120                                | 48                                 | 34                                 | 10                                 | 2                                  |                                    |                          | 28          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          |             |
|                                               |                                    |                                    | 14                                 | 19                                 | 64                                 | 329                                | 145                                | 74                                 | 7                                  |                                    |                                    |                          | 29          |
|                                               |                                    |                                    |                                    | 31                                 | 67                                 | 293                                | 160                                | 91                                 | 19                                 | 4                                  | 1                                  |                          | 30          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          |             |
|                                               |                                    |                                    |                                    | 10                                 | 22                                 | 132                                | 20                                 | 16                                 |                                    |                                    |                                    |                          | 31          |
|                                               |                                    |                                    |                                    | 4                                  | 21                                 | 138                                | 24                                 | 17                                 |                                    |                                    |                                    |                          | 32          |
|                                               |                                    |                                    |                                    |                                    | 29                                 | 73                                 | 26                                 | 24                                 | 3                                  |                                    | 1                                  |                          | 33          |
|                                               |                                    |                                    |                                    | 3                                  | 33                                 | 72                                 | 31                                 | 21                                 | 1                                  |                                    |                                    |                          | 34          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                          |             |
|                                               |                                    |                                    |                                    | 10                                 | 51                                 | 205                                | 46                                 | 40                                 | 3                                  |                                    | 1                                  |                          | 35          |
|                                               |                                    |                                    |                                    | 7                                  | 54                                 | 210                                | 55                                 | 38                                 | 1                                  |                                    |                                    |                          | 36          |

# OPEN-HEARTH FURNACES.<sup>1</sup>

## SUMMARY.

In 1915 the average rate of wages or earnings per hour in the open-hearth furnace department was from 2 to 16 per cent higher than in any of the five years preceding, and as the average full-time hours per week had decreased only a little during the period full-time weekly earnings in the several years followed the same course as rates of wages.

The most significant facts concerning the open-hearth furnace occupations which are covered in this section of the report are summarized in Table 19. Data are presented for each year from 1910 to 1915, inclusive, figures for identical plants being grouped together. The data for 1915 represents 3,358 open-hearth employees in the 15 specified occupations and 2,065 in unclassified productive and nonproductive occupations reported for 1914 and 1915 only, making a total of 5,423, and were obtained from 22 plants, having 229 furnaces, capable of producing 35 per cent of the total tonnage of open-hearth steel ingots made in the United States.

In this table occupations are grouped according to the wages paid, beginning with the lowest-paid group, and the occupations in each group are presented in alphabetical order. Classified full-time hours per week and rates of wages per hour are shown by percentages which were computed from the actual data given in Table E.

TABLE 19.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1915—OPEN-HEARTH FURNACES.

[The figures for each group of years are for identical plants.]

| Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |     |                      |    | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                     |                      |                      |                   | Average full-time weekly earnings. |
|-----------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|----------------------|-----|----------------------|----|---------------------------------|-----------------------------------------------------|---------------------|----------------------|----------------------|-------------------|------------------------------------|
|                                   |       |                      |                                   | 60 and under.                                              | Over 60 and under 72 | 72] | Over 72 and under 84 | 84 |                                 | 7 and under 8 cts.                                  | 8 and under 10 cts. | 10 and under 12 cts. | 12 and under 14 cts. | 14 cts. and over. |                                    |
|                                   |       |                      |                                   |                                                            |                      |     |                      |    |                                 |                                                     |                     |                      |                      |                   |                                    |
| Door operators:                   |       |                      |                                   |                                                            |                      |     |                      |    |                                 |                                                     |                     |                      |                      |                   |                                    |
| 15 plants.....                    | 1910  | 165                  | 75.9                              | .....                                                      | 12                   | 38  | 22                   | 28 | \$0.101                         | 6                                                   | 45                  | 32                   | 9                    | 9                 | \$7.72                             |
|                                   | 1911  | 160                  | 75.5                              | .....                                                      | 21                   | 24  | 31                   | 24 | .100                            | 6                                                   | 40                  | 39                   | 15                   | .....             | 7.53                               |
|                                   | 1912  | 157                  | 76.0                              | .....                                                      | 20                   | 28  | 21                   | 31 | .102                            | 6                                                   | 33                  | 45                   | 17                   | .....             | 7.72                               |
| 15 plants.....                    | 1912  | 155                  | 76.4                              | .....                                                      | 21                   | 25  | 21                   | 34 | .100                            | 7                                                   | 35                  | 45                   | 13                   | .....             | 7.68                               |
|                                   | 1913  | 160                  | 76.9                              | .....                                                      | 20                   | 19  | 28                   | 34 | .112                            | .....                                               | 33                  | 30                   | 25                   | 13                | 8.68                               |
|                                   | 1914  | 148                  | 76.8                              | .....                                                      | 16                   | 24  | 28                   | 31 | .108                            | .....                                               | 34                  | 31                   | 31                   | 4                 | 8.30                               |
| 19 plants.....                    | 1914  | 170                  | 77.0                              | .....                                                      | 14                   | 24  | 32                   | 31 | .109                            | .....                                               | 33                  | 32                   | 32                   | 4                 | 8.35                               |
|                                   | 1915  | 176                  | 76.5                              | .....                                                      | 14                   | 25  | 38                   | 24 | .111                            | .....                                               | 30                  | 41                   | 18                   | 11                | 8.43                               |

<sup>1</sup> Summary figures relating to the open-hearth furnace department of the iron and steel industry are given with figures for other departments on pages 7 to 26; and an account of the volume of employment in this and other departments from July, 1913, to June, 1915, is given on pages 26 to 55; an explanation of the scope of the investigation and of the methods employed is given on pages 55 to 59.



TABLE 19.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1915—OPEN-HEARTH FURNACES—Continued.

| Occupation, and number of plants. | Year. | Num-ber of em-ploy-ees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |    |                      | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                      | Average full-time weekly earnings. |                   |
|-----------------------------------|-------|-------------------------|-----------------------------------|------------------------------------------------------------|----------------------|----|----------------------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|----------------------|------------------------------------|-------------------|
|                                   |       |                         |                                   | 60 and under.                                              | Over 60 and under 72 | 72 | Over 72 and under 84 |                                 | 84                                                  | 12 and under 16 cts. | 16 and under 18 cts. | 18 and under 20 cts. | 20 and under 25 cts. |                                    | 25 cts. and over. |
|                                   |       |                         |                                   |                                                            |                      |    |                      |                                 |                                                     |                      |                      |                      |                      |                                    |                   |
| Laborers:                         |       |                         |                                   |                                                            |                      |    |                      |                                 |                                                     |                      |                      |                      |                      |                                    |                   |
| 17 plants . . . . .               | 1910  | 1,038                   | 74.5                              | 10                                                         | 20                   | 13 | 35                   | 22                              | \$0.157                                             | 45                   | 55                   |                      |                      | \$11.69                            |                   |
|                                   | 1911  | 806                     | 73.2                              | 11                                                         | 24                   | 15 | 37                   | 14                              | .161                                                | 34                   | 64                   | 2                    |                      | 11.78                              |                   |
|                                   | 1912  | 897                     | 74.4                              | 12                                                         | 13                   | 15 | 44                   | 17                              | .163                                                | 22                   | 75                   | 3                    |                      | 12.10                              |                   |
| 17 plants . . . . .               | 1912  | 948                     | 74.7                              | 11                                                         | 13                   | 17 | 39                   | 21                              | .164                                                | 22                   | 70                   | 8                    |                      | 12.21                              |                   |
|                                   | 1913  | 1,109                   | 76.2                              | 8                                                          | 6                    | 25 | 31                   | 30                              | .187                                                | 6                    | 29                   | 19                   | 46                   | 14.24                              |                   |
| 17 plants . . . . .               | 1913  | 800                     | 76.2                              | 10                                                         | 7                    | 19 | 29                   | 34                              | .185                                                | 8                    | 32                   | 24                   | 37                   | 14.05                              |                   |
|                                   | 1914  | 672                     | 70.8                              | 28                                                         | 17                   | 5  | 40                   | 10                              | .186                                                | 4                    | 36                   | 25                   | 35                   | 13.15                              |                   |
| 22 plants . . . . .               | 1914  | 805                     | 69.5                              | 38                                                         | 14                   | 4  | 34                   | 9                               | .185                                                | 4                    | 41                   | 22                   | 33                   | 12.84                              |                   |
|                                   | 1915  | 723                     | 70.8                              | 29                                                         | 22                   | 6  | 30                   | 13                              | .186                                                | 4                    | 30                   | 24                   | 41                   | 13.19                              |                   |
| Melters' helpers, third:          |       |                         |                                   |                                                            |                      |    |                      |                                 |                                                     |                      |                      |                      |                      |                                    |                   |
| 17 plants . . . . .               | 1910  | 393                     | 76.5                              |                                                            | 8                    | 36 | 30                   | 27                              | .196                                                | 4                    | 38                   | 17                   | 41                   | 14.97                              |                   |
|                                   | 1911  | 394                     | 73.9                              |                                                            | 20                   | 37 | 36                   | 8                               | .185                                                | 21                   | 22                   | 24                   | 33                   | 13.67                              |                   |
|                                   | 1912  | 414                     | 75.4                              |                                                            | 7                    | 30 | 46                   | 16                              | .199                                                | 18                   | 14                   | 15                   | 45                   | 15.01                              |                   |
| 16 plants . . . . .               | 1912  | 390                     | 75.8                              |                                                            | 2                    | 28 | 50                   | 20                              | .200                                                | 19                   | 13                   | 11                   | 48                   | 15.17                              |                   |
|                                   | 1913  | 416                     | 77.6                              |                                                            | 1                    | 26 | 40                   | 33                              | .217                                                | 5                    | 8                    | 14                   | 53                   | 16.86                              |                   |
| 16 plants . . . . .               | 1913  | 458                     | 77.9                              |                                                            | 1                    | 25 | 38                   | 36                              | .214                                                | 4                    | 15                   | 13                   | 50                   | 16.64                              |                   |
|                                   | 1914  | 392                     | 77.3                              |                                                            |                      | 42 | 25                   | 33                              | .207                                                | 3                    | 16                   | 11                   | 61                   | 16.04                              |                   |
| 21 plants . . . . .               | 1914  | 442                     | 77.4                              |                                                            |                      | 39 | 30                   | 31                              | .207                                                | 3                    | 18                   | 14                   | 58                   | 15.98                              |                   |
|                                   | 1915  | 454                     | 77.7                              |                                                            |                      | 38 | 29                   | 33                              | .212                                                | 3                    | 7                    | 20                   | 52                   | 16.44                              |                   |
| Stockers:                         |       |                         |                                   |                                                            |                      |    |                      |                                 |                                                     |                      |                      |                      |                      |                                    |                   |
| 17 plants . . . . .               | 1910  | 448                     | 76.8                              |                                                            | 13                   | 24 | 34                   | 28                              | .177                                                | 33                   | 19                   | 17                   | 32                   | 13.69                              |                   |
|                                   | 1911  | 419                     | 74.4                              | 3                                                          | 26                   | 24 | 28                   | 19                              | .172                                                | 38                   | 25                   | 34                   | 4                    | 12.73                              |                   |
|                                   | 1912  | 403                     | 76.6                              |                                                            | 7                    | 30 | 39                   | 25                              | .176                                                | 31                   | 40                   | 7                    | 18                   | 13.49                              |                   |
| 17 plants . . . . .               | 1912  | 413                     | 77.0                              |                                                            | 7                    | 25 | 40                   | 28                              | .176                                                | 32                   | 38                   | 13                   | 14                   | 13.51                              |                   |
|                                   | 1913  | 417                     | 77.8                              |                                                            | 8                    | 22 | 40                   | 31                              | .197                                                | 1                    | 29                   | 30                   | 32                   | 15.30                              |                   |
| 17 plants . . . . .               | 1913  | 411                     | 77.7                              |                                                            | 8                    | 22 | 41                   | 30                              | .198                                                |                      | 30                   | 30                   | 33                   | 15.37                              |                   |
|                                   | 1914  | 355                     | 76.7                              | (1)                                                        | 9                    | 21 | 45                   | 24                              | .205                                                | (1)                  | 35                   | 23                   | 24                   | 15.66                              |                   |
| 22 plants . . . . .               | 1914  | 409                     | 77.0                              | (1)                                                        | 8                    | 21 | 48                   | 23                              | .204                                                | (1)                  | 32                   | 25                   | 26                   | 15.66                              |                   |
|                                   | 1915  | 366                     | 77.3                              | 2                                                          | 8                    | 21 | 38                   | 30                              | .199                                                | 1                    | 26                   | 28                   | 43                   | 15.41                              |                   |
| Switchmen:                        |       |                         |                                   |                                                            |                      |    |                      |                                 |                                                     |                      |                      |                      |                      |                                    |                   |
| 14 plants . . . . .               | 1910  | 109                     | 77.3                              |                                                            | 6                    | 22 | 44                   | 28                              | .185                                                | 11                   | 32                   | 31                   | 26                   | 14.29                              |                   |
|                                   | 1911  | 113                     | 74.5                              |                                                            | 36                   | 20 | 35                   | 9                               | .187                                                | 5                    | 26                   | 46                   | 23                   | 13.90                              |                   |
| 15 plants . . . . .               | 1911  | 117                     | 74.4                              |                                                            | 39                   | 19 | 34                   | 9                               | .186                                                | 7                    | 25                   | 44                   | 24                   | 13.85                              |                   |
|                                   | 1912  | 112                     | 74.6                              |                                                            | 16                   | 29 | 46                   | 9                               | .198                                                | 5                    | 18                   | 41                   | 23                   | 14.75                              |                   |
| 15 plants . . . . .               | 1912  | 118                     | 75.2                              |                                                            | 15                   | 19 | 56                   | 10                              | .199                                                | 5                    | 15                   | 44                   | 29                   | 14.92                              |                   |
|                                   | 1913  | 117                     | 76.8                              |                                                            | 15                   | 15 | 50                   | 21                              | .230                                                | 2                    | 7                    | 3                    | 56                   | 17.63                              |                   |
| 16 plants . . . . .               | 1913  | 127                     | 76.3                              |                                                            | 13                   | 23 | 49                   | 16                              | .230                                                |                      | 5                    | 9                    | 52                   | 17.55                              |                   |
|                                   | 1914  | 131                     | 76.3                              |                                                            | 12                   | 23 | 41                   | 24                              | .227                                                |                      | 5                    | 8                    | 56                   | 17.32                              |                   |
| 21 plants . . . . .               | 1914  | 149                     | 76.5                              |                                                            | 11                   | 23 | 44                   | 22                              | .226                                                |                      | 5                    | 11                   | 53                   | 17.29                              |                   |
|                                   | 1915  | 150                     | 77.0                              |                                                            | 5                    | 25 | 45                   | 25                              | .225                                                | 1                    | 5                    | 7                    | 65                   | 17.33                              |                   |
|                                   |       |                         |                                   |                                                            |                      |    |                      |                                 |                                                     |                      | Un-der 20 cts.       | 20 and under 25 cts. | 25 and under 30 cts. | 30 and under 40 cts.               | 40 cts. and over. |
| Charging-machine operators:       |       |                         |                                   |                                                            |                      |    |                      |                                 |                                                     |                      |                      |                      |                      |                                    |                   |
| 17 plants . . . . .               | 1910  | 73                      | 76.8                              |                                                            | 8                    | 34 | 27                   | 30                              | .294                                                | 6                    | 3                    | 48                   | 36                   | 8                                  | 22.52             |
|                                   | 1911  | 72                      | 74.7                              |                                                            | 25                   | 25 | 33                   | 17                              | .287                                                | 11                   | 14                   | 36                   | 31                   | 8                                  | 21.37             |
|                                   | 1912  | 72                      | 75.5                              |                                                            | 14                   | 39 | 25                   | 22                              | .312                                                | 6                    | 3                    | 22                   | 69                   |                                    | 23.56             |
| 17 plants . . . . .               | 1912  | 72                      | 75.8                              |                                                            | 14                   | 36 | 25                   | 25                              | .312                                                | 6                    | 3                    | 19                   | 72                   |                                    | 23.67             |
|                                   | 1913  | 76                      | 78.0                              |                                                            | 13                   | 16 | 32                   | 40                              | .335                                                |                      | 5                    | 26                   | 55                   | 13                                 | 26.12             |
|                                   | 1914  | 74                      | 77.0                              |                                                            | 5                    | 38 | 24                   | 32                              | .309                                                |                      | 16                   | 36                   | 45                   | 3                                  | 23.66             |
| 22 plants . . . . .               | 1914  | 86                      | 77.4                              |                                                            | 5                    | 33 | 33                   | 30                              | .307                                                |                      | 16                   | 34                   | 48                   | 2                                  | 23.66             |
|                                   | 1915  | 86                      | 77.7                              |                                                            | 5                    | 30 | 33                   | 33                              | .330                                                |                      | 14                   | 21                   | 44                   | 21                                 | 25.54             |

<sup>1</sup> Less than one-half of 1 per cent.<sup>2</sup> Including less than one-half of 1 per cent whose full-time hours per week were 89.

150 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

TABLE 19.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1915—OPEN-HEARTH FURNACES—Continued.

| Occupation, and number of plants.        | Year.                | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |                |                      | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                |                      |                      |                         | Average full-time weekly earnings. |                   |
|------------------------------------------|----------------------|----------------------|-----------------------------------|------------------------------------------------------------|----------------------|----------------|----------------------|---------------------------------|-----------------------------------------------------|----------------|----------------------|----------------------|-------------------------|------------------------------------|-------------------|
|                                          |                      |                      |                                   | 60 and under.                                              | Over 60 and under 72 | 72             | Over 72 and under 84 |                                 | 84                                                  | Under 20 cts.  | 20 and under 25 cts. | 25 and under 30 cts. | 30 and under 40 cts.    |                                    | 40 cts. and over. |
|                                          |                      |                      |                                   |                                                            |                      |                |                      |                                 |                                                     |                |                      |                      |                         |                                    |                   |
| Engineers, locomotive: 14 plants.....    | 1910<br>1911         | 107<br>110           | 77.3<br>74.4                      | .....<br>.....                                             | 6<br>36              | 23<br>20       | 45<br>36             | 26<br>8                         | \$0.244<br>.248                                     | 9<br>5         | 49<br>41             | 36<br>52             | 6<br>2                  | \$18.92<br>18.40                   |                   |
| 15 plants.....                           | 1911<br>1912         | 114<br>111           | 74.3<br>75.2                      | .....<br>.....                                             | 38<br>14             | 19<br>20       | 35<br>58             | 8<br>8                          | .247<br>.261                                        | 7<br>7         | 40<br>23             | 52<br>51             | 2<br>18                 | 18.32<br>19.61                     |                   |
| 15 plants.....                           | 1912<br>1913         | 117<br>114           | 75.8<br>76.8                      | .....<br>.....                                             | 14<br>14             | 10<br>15       | 67<br>51             | 9<br>20                         | .262<br>.293                                        | 7<br>4         | 22<br>12             | 54<br>36             | 17<br>48                | 19.86<br>22.50                     |                   |
| 16 plants.....                           | 1913<br>1914         | 119<br>119           | 76.6<br>76.3                      | .....<br>.....                                             | 12<br>12             | 19<br>20       | 52<br>45             | 17<br>23                        | .295<br>.284                                        | 2<br>.....     | 12<br>12             | 40<br>50             | 46<br>39                | 22.55<br>21.67                     |                   |
| 21 plants.....                           | 1914<br>1915         | 137<br>138           | 76.5<br>77.1                      | .....<br>.....                                             | 10<br>6              | 20<br>21       | 48<br>49             | 21<br>24                        | .281<br>.279                                        | .....<br>3     | 15<br>14             | 48<br>54             | 36<br>28                | 21.51<br>21.57                     |                   |
| Ingot strippers: 15 plants.....          | 1910<br>1911<br>1912 | 46<br>51<br>49       | 73.7<br>71.9<br>72.4              | 7<br>6<br>6                                                | 22<br>8<br>.....     | 30<br>63<br>69 | 17<br>20<br>20       | 24<br>4<br>4                    | .275<br>.256<br>.251                                | 9<br>39<br>8   | 41<br>14<br>12       | 22<br>22<br>33       | 22<br>6<br>6            | 19.88<br>18.06<br>20.00            |                   |
| 15 plants.....                           | 1912<br>1913         | 55<br>61             | 72.9<br>74.5                      | 6<br>5                                                     | .....<br>.....       | 69<br>46       | 18<br>30             | 7<br>20                         | .278<br>.296                                        | 4<br>3         | 47<br>5              | 15<br>56             | 29<br>26                | 19.99<br>21.85                     |                   |
| 14 plants.....                           | 1913<br>1914         | 41<br>39             | 76.0<br>74.9                      | 7<br>8                                                     | .....<br>.....       | 34<br>36       | 29<br>41             | 29<br>15                        | .302<br>.292                                        | 15<br>10       | 5<br>38              | 32<br>28             | 37<br>8                 | 22.54<br>21.41                     |                   |
| 18 plants.....                           | 1914<br>1915         | 47<br>48             | 75.8<br>76.3                      | 6<br>6                                                     | .....<br>.....       | 30<br>29       | 47<br>42             | 17<br>23                        | .292<br>.303                                        | 15<br>4        | 113<br>21            | 32<br>23             | 36<br>42                | 21.72<br>22.76                     |                   |
| Ladle cranemen: 16 plants.....           | 1910<br>1911<br>1912 | 90<br>86<br>90       | 77.2<br>74.6<br>76.2              | .....<br>.....<br>.....                                    | 9<br>24<br>10        | 28<br>34<br>32 | 31<br>23<br>31       | 32<br>19<br>27                  | .294<br>.287<br>.317                                | 7<br>8<br>7    | 22<br>16<br>8        | 21<br>40<br>.....    | 43<br>28<br>86          | 22.76<br>21.32<br>24.22            |                   |
| 17 plants.....                           | 1912<br>1913<br>1914 | 88<br>90<br>89       | 76.0<br>77.2<br>76.2              | .....<br>.....<br>.....                                    | 10<br>9<br>7         | 33<br>18<br>24 | 32<br>44<br>45       | 25<br>29<br>25                  | .317<br>.341<br>.307                                | 7<br>7<br>7    | 8<br>9<br>33         | 2<br>7<br>54         | 83<br>80<br>.....       | 24.14<br>25.34<br>23.39            |                   |
| 22 plants.....                           | 1914<br>1915         | 104<br>107           | 76.5<br>76.0                      | .....<br>.....                                             | 6<br>6               | 24<br>29       | 47<br>47             | 23<br>19                        | .305<br>.327                                        | 6<br>6         | 10<br>3              | 31<br>25             | 54<br>54                | 23.34<br>24.92                     |                   |
| Melters' helpers, second: 17 plants..... | 1910<br>1911<br>1912 | 339<br>335<br>347    | 76.6<br>74.5<br>75.8              | .....<br>.....<br>.....                                    | 8<br>35<br>20        | 38<br>21<br>37 | 22<br>21<br>14       | 31<br>23<br>29                  | .272<br>.263<br>.274                                | 5<br>8<br>6    | 25<br>32<br>21       | 40<br>39<br>44       | 30<br>22<br>29          | 20.87<br>19.62<br>20.77            |                   |
| 17 plants.....                           | 1912<br>1913<br>1914 | 345<br>360<br>352    | 76.1<br>76.7<br>74.1              | .....<br>.....<br>.....                                    | 20<br>19<br>10       | 35<br>29<br>28 | 15<br>14<br>21       | 31<br>37<br>23                  | .275<br>.292<br>.280                                | 6<br>1<br>4    | 19<br>22<br>25       | 47<br>30<br>39       | 29<br>47<br>31          | 20.98<br>22.36<br>20.67            |                   |
| 22 plants.....                           | 1914<br>1915         | 402<br>420           | 74.7<br>74.5                      | 9<br>10                                                    | 15<br>14             | 25<br>24       | 29<br>31             | 22<br>21                        | .278<br>.291                                        | 3<br>(1)       | 28<br>29             | 37<br>25             | 31<br>44                | 20.70<br>21.57                     |                   |
| Mold cappers: 8 plants.....              | 1910<br>1911<br>1912 | 40<br>38<br>42       | 76.5<br>74.0<br>75.9              | .....<br>.....<br>.....                                    | .....<br>21<br>19    | 55<br>26<br>29 | 15<br>42<br>33       | 30<br>11<br>19                  | .217<br>.215<br>.223                                | 35<br>37<br>19 | 35<br>37<br>43       | 15<br>15<br>29       | 15<br>16<br>10          | 16.49<br>15.78<br>16.86            |                   |
| 9 plants.....                            | 1912<br>1913         | 52<br>56             | 79.3<br>79.2                      | .....<br>.....                                             | 15<br>.....          | 8<br>11        | 27<br>50             | 50<br>39                        | .228<br>.257                                        | 27<br>29       | 35<br>14             | 31<br>29             | 8<br>29                 | 18.00<br>20.34                     |                   |
| 12 plants.....                           | 1913<br>1914         | 68<br>62             | 78.6<br>77.3                      | .....<br>.....                                             | 6<br>13              | 12<br>29       | 41<br>23             | 41<br>35                        | .255<br>.231                                        | 21<br>13       | 32<br>55             | 24<br>32             | 24<br>.....             | 20.04<br>17.78                     |                   |
| 13 plants.....                           | 1914<br>1915         | 70<br>72             | 77.7<br>76.1                      | .....<br>.....                                             | 11<br>11             | 26<br>42       | 31<br>28             | 31<br>19                        | .232<br>.254                                        | 11<br>21       | 60<br>28             | 29<br>51             | .....<br>10             | 17.96<br>19.24                     |                   |
| Stock cranemen: 13 plants.....           | 1910<br>1911<br>1912 | 75<br>70<br>66       | 78.8<br>75.6<br>77.7              | 1<br>1<br>.....                                            | 3<br>23<br>.....     | 16<br>10<br>18 | 40<br>43<br>52       | 40<br>23<br>30                  | .223<br>.207<br>.235                                | 15<br>24<br>12 | 67<br>76<br>49       | 19<br>.....<br>39    | .....<br>.....<br>..... | 17.60<br>15.61<br>18.29            |                   |

1 Less than one-half of 1 per cent.

TABLE 191.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1915—OPEN-HEARTH FURNACES—Concluded.

| Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |    |                      |      | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                   | Average full-time weekly earnings. |
|-----------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|----------------------|----|----------------------|------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|-------------------|------------------------------------|
|                                   |       |                      |                                   | 60 and under.                                              | Over 60 and under 72 | 72 | Over 72 and under 84 | 84   |                                 | Under 20 cts.                                       | 20 and under 25 cts. | 25 and under 30 cts. | 30 and under 40 cts. | 40 cts. and over. |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |      |                                 |                                                     |                      |                      |                      |                   |                                    |
| Stock cranemen—Con.               |       |                      |                                   |                                                            |                      |    |                      |      |                                 |                                                     |                      |                      |                      |                   |                                    |
| 14 plants.....                    | 1912  | 72                   | 78.9                              |                                                            |                      | 11 | 47                   | 42   | \$0.228                         | 22                                                  | 44                   | 33                   |                      |                   | \$18.02                            |
|                                   | 1913  | 80                   | 79.6                              |                                                            |                      | 10 | 48                   | 43   | .239                            | 8                                                   | 66                   | 24                   | 3                    |                   | 19.01                              |
| 15 plants.....                    | 1913  | 84                   | 79.1                              |                                                            | 5                    | 10 | 45                   | 40   | .238                            | 7                                                   | 68                   | 23                   | 2                    |                   | 18.85                              |
|                                   | 1914  | 80                   | 78.3                              |                                                            | 5                    | 13 | 43                   | 40   | .239                            | 1                                                   | 73                   | 26                   |                      |                   | 18.70                              |
| 20 plants.....                    | 1914  | 98                   | 78.4                              |                                                            | 4                    | 12 | 49                   | 35   | .237                            | 5                                                   | 67                   | 28                   |                      |                   | 18.58                              |
|                                   | 1915  | 94                   | 77.4                              |                                                            | 4                    | 23 | 47                   | 26   | .253                            | 5                                                   | 50                   | 36                   | 3                    | 5                 | 19.77                              |
| Unclassified—productive:          |       |                      |                                   |                                                            |                      |    |                      |      |                                 |                                                     |                      |                      |                      |                   |                                    |
| 22 plants.....                    | 1914  | 849                  | 75.3                              | 4                                                          | 10                   | 36 | 27                   | 1 21 | .217                            | 30                                                  | 52                   | 14                   | 4                    | (2)               | 16.29                              |
|                                   | 1915  | 917                  | 75.4                              | 2                                                          | 12                   | 36 | 28                   | 1 21 | .227                            | 25                                                  | 42                   | 24                   | 8                    | (2)               | 17.11                              |
| Unclassified—nonproductive:       |       |                      |                                   |                                                            |                      |    |                      |      |                                 |                                                     |                      |                      |                      |                   |                                    |
| 21 plants.....                    | 1914  | 1,141                | 73.1                              | 25                                                         | 9                    | 20 | 11                   | 3 35 | .227                            | 34                                                  | 38                   | 15                   | 9                    | 5                 | 16.37                              |
|                                   | 1915  | 1,148                | 71.5                              | 29                                                         | 12                   | 20 | 10                   | 3 29 | .233                            | 33                                                  | 38                   | 15                   | 8                    | 5                 | 16.39                              |
|                                   |       |                      |                                   |                                                            |                      |    |                      |      |                                 | 20 and under 30 cts.                                | 30 and under 40 cts. | 40 and under 50 cts. | 50 and under 60 cts. | 60 cts. and over. |                                    |
| Melters' helpers, first:          |       |                      |                                   |                                                            |                      |    |                      |      |                                 |                                                     |                      |                      |                      |                   |                                    |
| 17 plants.....                    | 1910  | 341                  | 77.7                              |                                                            | 7                    | 22 | 40                   | 31   | .416                            | 4                                                   | 36                   | 50                   | 11                   |                   | 32.27                              |
|                                   | 1911  | 338                  | 75.3                              |                                                            | 17                   | 21 | 49                   | 13   | .400                            | 10                                                  | 40                   | 42                   | 8                    |                   | 30.12                              |
|                                   | 1912  | 347                  | 76.5                              |                                                            | 2                    | 24 | 55                   | 19   | .417                            | 6                                                   | 30                   | 50                   | 13                   |                   | 31.89                              |
| 17 plants.....                    | 1912  | 345                  | 76.8                              |                                                            | 2                    | 21 | 55                   | 21   | .417                            | 6                                                   | 32                   | 50                   | 13                   |                   | 31.99                              |
|                                   | 1913  | 364                  | 77.1                              |                                                            | 3                    | 17 | 55                   | 26   | .440                            | 3                                                   | 28                   | 42                   | 29                   | 1                 | 33.89                              |
|                                   | 1914  | 354                  | 74.8                              | 10                                                         |                      | 16 | 61                   | 13   | .424                            | 5                                                   | 35                   | 44                   | 13                   | 3                 | 31.59                              |
| 22 plants.....                    | 1914  | 404                  | 75.6                              | 9                                                          |                      | 14 | 62                   | 15   | .420                            | 5                                                   | 38                   | 43                   | 11                   | 2                 | 31.60                              |
|                                   | 1915  | 422                  | 75.5                              | 10                                                         |                      | 13 | 63                   | 14   | .437                            | (2)                                                 | 32                   | 44                   | 23                   | 1                 | 32.80                              |
| Steel pourers:                    |       |                      |                                   |                                                            |                      |    |                      |      |                                 |                                                     |                      |                      |                      |                   |                                    |
| 14 plants.....                    | 1910  | 47                   | 75.3                              |                                                            | 11                   | 49 | 17                   | 23   | .308                            | 51                                                  | 40                   | 9                    |                      |                   | 23.05                              |
|                                   | 1911  | 44                   | 73.7                              |                                                            | 23                   | 27 | 41                   | 9    | .304                            | 45                                                  | 50                   | 5                    |                      |                   | 22.32                              |
|                                   | 1912  | 46                   | 75.3                              |                                                            | 22                   | 30 | 30                   | 17   | .313                            | 39                                                  | 52                   | 9                    |                      |                   | 23.52                              |
| 15 plants.....                    | 1912  | 50                   | 76.5                              |                                                            | 20                   | 24 | 28                   | 28   | .321                            | 28                                                  | 64                   | 8                    |                      |                   | 24.57                              |
|                                   | 1913  | 52                   | 77.6                              |                                                            | 4                    | 19 | 46                   | 31   | .352                            | 19                                                  | 62                   | 19                   |                      |                   | 27.26                              |
| 16 plants.....                    | 1913  | 56                   | 77.0                              |                                                            | 4                    | 25 | 46                   | 25   | .370                            | 14                                                  | 57                   | 21                   | 7                    |                   | 28.46                              |
|                                   | 1914  | 56                   | 75.9                              |                                                            | 14                   | 39 | 21                   | 25   | .339                            | 32                                                  | 57                   | 4                    | 7                    |                   | 25.72                              |
| 21 plants.....                    | 1914  | 70                   | 76.4                              |                                                            | 11                   | 37 | 29                   | 23   | .339                            | 31                                                  | 54                   | 9                    | 6                    |                   | 25.94                              |
|                                   | 1915  | 70                   | 75.7                              |                                                            | 11                   | 43 | 29                   | 17   | .356                            | 21                                                  | 53                   | 26                   |                      |                   | 26.99                              |
| Stopper setters:                  |       |                      |                                   |                                                            |                      |    |                      |      |                                 |                                                     |                      |                      |                      |                   |                                    |
| 10 plants.....                    | 1910  | 30                   | 76.2                              |                                                            |                      | 37 | 57                   | 7    | .313                            | 47                                                  | 33                   | 13                   | 7                    |                   | 23.63                              |
|                                   | 1911  | 29                   | 73.5                              |                                                            | 28                   | 21 | 52                   |      | .313                            | 45                                                  | 38                   | 10                   | 7                    |                   | 23.11                              |
|                                   | 1912  | 29                   | 75.8                              |                                                            |                      | 21 | 72                   | 7    | .329                            | 45                                                  | 28                   | 28                   |                      |                   | 24.92                              |
| 8 plants.....                     | 1912  | 26                   | 76.0                              |                                                            |                      | 15 | 77                   | 8    | .326                            | 46                                                  | 31                   | 23                   |                      |                   | 24.80                              |
|                                   | 1913  | 26                   | 76.7                              |                                                            |                      | 15 | 85                   |      | .363                            | 31                                                  | 46                   | 15                   | 8                    |                   | 27.78                              |
| 9 plants.....                     | 1913  | 30                   | 77.3                              |                                                            |                      | 13 | 80                   | 7    | .325                            | 47                                                  | 47                   | 7                    |                      |                   | 25.10                              |
|                                   | 1914  | 30                   | 74.4                              |                                                            |                      | 67 | 27                   | 7    | .292                            | 67                                                  | 33                   |                      |                      |                   | 21.67                              |
| 10 plants.....                    | 1914  | 32                   | 75.0                              |                                                            |                      | 63 | 25                   | 13   | .287                            | 69                                                  | 31                   |                      |                      |                   | 21.46                              |
|                                   | 1915  | 32                   | 74.6                              |                                                            | 25                   | 38 | 25                   | 13   | .296                            | 53                                                  | 44                   |                      |                      |                   | 21.96                              |

<sup>1</sup> Including less than one-half of 1 per cent whose full-time hours per week were 98.<sup>2</sup> Less than one-half of 1 per cent.<sup>3</sup> Including less than one-half of 1 per cent whose full-time hours per week were 91.

Referring to the first occupation presented in Table 19, above, door operators, direct comparison can be made of data for 15 identical plants for 1910 to 1912, inclusive, for another group of 15 plants for 1912, 1913, and 1914, and for 19 plants for 1914 and 1915. The first line of the table is analyzed as follows: In 1910 the 15 open-hearth furnaces for which reports were obtained employed 165 door operators, whose average full-time hours of work were 75.9 per week. For 12 per cent of the 165 door operators the full-time hours per week were over 60 and under 72; for 38 per cent, 72; for 22 per cent, over 72 and under 84; and for 28 per cent, 84. The average rate of wages or earnings per hour of door operators in the year considered (1910) was 10.1 cents; of the total number 51 per cent received under 10 cents per hour; 32 per cent 10 and under 12 cents; 9 per cent, 12 and under 14 cents; and 9 per cent 14 cents and over per hour.

Referring to the last column of the table, it is seen that in 15 plants the average full-time weekly earnings of the door operators were \$7.72 in both 1910 and 1912, decreasing to \$7.53 in 1911, while in the second group of 15 plants the average was \$7.68 in 1912, \$8.68 in 1913, and a decrease to \$8.30 in 1914. In the group of 19 plants there was an increase from \$8.35 in 1914 to \$8.43 for 1915. Comparing the average full-time weekly earnings for 1915 of the several occupations, it is seen that with the exception of door operators, who are usually boys, the lowest average was that of laborers, which was \$13.19, and the highest that of melters' first helpers, which was \$32.80.

#### INDEX NUMBERS.

To aid in making a comparison of the actual data for the six years which will give an accurate measure of the changes throughout the period, relative or index numbers have been computed from the averages shown in Table 19 for full-time hours per week, rates of wages per hour, and full-time weekly earnings for each occupation from 1910 to 1915, inclusive. Such figures appear in Table 20, which follows. These relative or index numbers are simply percentages for which the data for 1915 are taken as the base, or 100 per cent. The relative for each year is the per cent which the average for that year is of the average for 1915. For example, the relative full-time weekly earnings of stockers in 1910 were 89 as compared with 100 in 1915; that is, the full-time weekly earnings of stockers in 1910 were 89 per cent of the full-time weekly earnings in this occupation in 1915. The method of computing relative numbers is explained on pages 65 to 67.

Table 20 also shows for each occupation the per cent of increase or decrease in full-time hours per week, rates of wages per hour, and full-time weekly earnings in 1915 as compared with each specified year preceding. Thus, the full-time weekly earnings of stockers in 1915 were 12 per cent higher than in 1910, 20 per cent higher

than in 1911, 14 per cent higher than in 1912, the same as in 1913, and 2 per cent lower than in 1914.

In other columns of the table is shown the per cent of change in each year as compared with the year immediately preceding. Thus the full-time weekly earnings of stockers in 1911 were 7 per cent lower than in 1910; in 1912 6 per cent higher than in 1911; in 1913 14 per cent higher than in 1912; in 1914 2 per cent higher than in 1913; and in 1915 2 per cent lower than in 1914. The other occupations and items of the table can be studied in like manner. The per cent of increase and decrease is computed from the relative numbers.

TABLE 20.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATIONS—*OPEN-HEARTH FURNACES*.

| Occupation and year.               | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|------------------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                                    | Relative full-time hours per week. | Per cent of increase (+) or decrease (-) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (-) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (-) in— |                                                      |
|                                    |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| <b>Stockers:</b>                   |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                          | 100                                | (1)                                          | —                                                    | 89                               | +12                                          | —                                                    | 89                                  | +12                                          | —                                                    |
| 1911.....                          | 87                                 | +3                                           | -3                                                   | 86                               | +16                                          | -3                                                   | 83                                  | +20                                          | -7                                                   |
| 1912.....                          | 100                                | (1)                                          | +3                                                   | 88                               | +14                                          | +2                                                   | 88                                  | +14                                          | +6                                                   |
| 1913.....                          | 101                                | -1                                           | +1                                                   | 99                               | +1                                           | +13                                                  | 100                                 | (1)                                          | +14                                                  |
| 1914.....                          | 100                                | (1)                                          | -1                                                   | 103                              | -3                                           | +4                                                   | 102                                 | -2                                           | +2                                                   |
| 1915.....                          | 100                                |                                              | (1)                                                  | 100                              |                                              | -3                                                   | 100                                 |                                              | -2                                                   |
| <b>Stock crane men:</b>            |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                          | 103                                | -3                                           | —                                                    | 85                               | +18                                          | —                                                    | 87                                  | +15                                          | —                                                    |
| 1911.....                          | 99                                 | +1                                           | -4                                                   | 78                               | +28                                          | -8                                                   | 77                                  | +30                                          | -11                                                  |
| 1912.....                          | 101                                | -1                                           | +2                                                   | 89                               | +12                                          | +14                                                  | 90                                  | +11                                          | +17                                                  |
| 1913.....                          | 102                                | -2                                           | +1                                                   | 93                               | +8                                           | +4                                                   | 95                                  | +5                                           | +6                                                   |
| 1914.....                          | 101                                | -1                                           | -1                                                   | 94                               | +6                                           | +1                                                   | 94                                  | +6                                           | -1                                                   |
| 1915.....                          | 100                                |                                              | -1                                                   | 100                              |                                              | +6                                                   | 100                                 |                                              | +6                                                   |
| <b>Charging-machine operators:</b> |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                          | 100                                | (1)                                          | —                                                    | 88                               | +14                                          | —                                                    | 89                                  | +12                                          | —                                                    |
| 1911.....                          | 97                                 | +3                                           | -3                                                   | 86                               | +16                                          | -2                                                   | 84                                  | +19                                          | -6                                                   |
| 1912.....                          | 98                                 | +2                                           | +1                                                   | 94                               | +6                                           | +9                                                   | 93                                  | +8                                           | +11                                                  |
| 1913.....                          | 101                                | -1                                           | +3                                                   | 101                              | -1                                           | +7                                                   | 102                                 | -2                                           | +10                                                  |
| 1914.....                          | 100                                | (1)                                          | -1                                                   | 93                               | +8                                           | -8                                                   | 93                                  | +8                                           | -9                                                   |
| 1915.....                          | 100                                |                                              | (1)                                                  | 100                              |                                              | +8                                                   | 100                                 |                                              | +8                                                   |
| <b>Door operators:</b>             |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                          | 100                                | (1)                                          | —                                                    | 90                               | +11                                          | —                                                    | 92                                  | +9                                           | —                                                    |
| 1911.....                          | 99                                 | +1                                           | -1                                                   | 89                               | +12                                          | -1                                                   | 90                                  | +11                                          | -2                                                   |
| 1912.....                          | 100                                | (1)                                          | +1                                                   | 91                               | +10                                          | +2                                                   | 92                                  | +9                                           | +2                                                   |
| 1913.....                          | 101                                | -1                                           | +1                                                   | 102                              | -2                                           | +12                                                  | 104                                 | -4                                           | +13                                                  |
| 1914.....                          | 101                                | -1                                           | (1)                                                  | 98                               | +2                                           | -4                                                   | 99                                  | +1                                           | -5                                                   |
| 1915.....                          | 100                                |                                              | -1                                                   | 100                              |                                              | +2                                                   | 100                                 |                                              | +1                                                   |
| <b>Melters' helpers, first:</b>    |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                          | 104                                | -4                                           | —                                                    | 94                               | +6                                           | —                                                    | 99                                  | +1                                           | —                                                    |
| 1911.....                          | 101                                | -1                                           | -3                                                   | 91                               | +10                                          | -3                                                   | 92                                  | +9                                           | -7                                                   |
| 1912.....                          | 103                                | -3                                           | +2                                                   | 95                               | +5                                           | +4                                                   | 98                                  | +2                                           | +7                                                   |
| 1913.....                          | 103                                | -3                                           | (1)                                                  | 100                              | (1)                                          | +5                                                   | 103                                 | -3                                           | +5                                                   |
| 1914.....                          | 100                                | (1)                                          | -3                                                   | 96                               | +4                                           | -4                                                   | 96                                  | +4                                           | -7                                                   |
| 1915.....                          | 100                                |                                              | (1)                                                  | 100                              |                                              | +4                                                   | 100                                 |                                              | +4                                                   |
| <b>Melters' helpers, second:</b>   |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                          | 104                                | -4                                           | —                                                    | 93                               | +8                                           | —                                                    | 98                                  | +2                                           | —                                                    |
| 1911.....                          | 101                                | -1                                           | -3                                                   | 90                               | +11                                          | -3                                                   | 92                                  | +9                                           | -6                                                   |
| 1912.....                          | 103                                | -3                                           | +2                                                   | 94                               | +6                                           | +4                                                   | 98                                  | +2                                           | +7                                                   |
| 1913.....                          | 104                                | -4                                           | +1                                                   | 100                              | (1)                                          | +6                                                   | 104                                 | -4                                           | +6                                                   |
| 1914.....                          | 100                                | (1)                                          | -4                                                   | 96                               | +4                                           | -4                                                   | 96                                  | +4                                           | -8                                                   |
| 1915.....                          | 100                                |                                              | (1)                                                  | 100                              |                                              | +4                                                   | 100                                 |                                              | +4                                                   |

<sup>1</sup> No change.

TABLE 20.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATIONS—OPEN-HEARTH FURNACES—Continued.

| Occupation and year.            | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|---------------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                                 | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in— |                                                      |
|                                 |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| <b>Melters' helpers, third:</b> |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                       | 100                                | (1)                                          | —                                                    | 92                               | + 9                                          | — 5                                                  | 90                                  | +11                                          | — 8                                                  |
| 1911.....                       | 96                                 | +4                                           | —4                                                   | 97                               | +15                                          | — 5                                                  | 83                                  | +20                                          | — 8                                                  |
| 1912.....                       | 98                                 | +2                                           | +2                                                   | 93                               | + 8                                          | + 7                                                  | 91                                  | +10                                          | +10                                                  |
| 1913.....                       | 100                                | (1)                                          | +2                                                   | 101                              | — 1                                          | + 9                                                  | 101                                 | — 1                                          | +11                                                  |
| 1914.....                       | 100                                | (1)                                          | (1)                                                  | 98                               | + 2                                          | — 3                                                  | 97                                  | + 3                                          | — 4                                                  |
| 1915.....                       | 100                                | (1)                                          | (1)                                                  | 100                              | —                                            | + 2                                                  | 100                                 | —                                            | + 3                                                  |
| <b>Stopper setters:</b>         |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                       | 104                                | —4                                           | —                                                    | 92                               | + 9                                          | —                                                    | 96                                  | + 4                                          | —                                                    |
| 1911.....                       | 100                                | (1)                                          | —4                                                   | 92                               | + 9                                          | (1)                                                  | 94                                  | + 6                                          | — 2                                                  |
| 1912.....                       | 104                                | —4                                           | +4                                                   | 97                               | + 3                                          | + 5                                                  | 101                                 | — 1                                          | + 7                                                  |
| 1913.....                       | 104                                | —4                                           | (1)                                                  | 108                              | — 7                                          | +11                                                  | 113                                 | —12                                          | +12                                                  |
| 1914.....                       | 101                                | —1                                           | —3                                                   | 97                               | + 3                                          | —10                                                  | 98                                  | + 2                                          | —13                                                  |
| 1915.....                       | 100                                | —                                            | —1                                                   | 100                              | —                                            | + 3                                                  | 100                                 | —                                            | + 2                                                  |
| <b>Steel pourers:</b>           |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                       | 101                                | —1                                           | —                                                    | 93                               | + 8                                          | —                                                    | 94                                  | + 6                                          | —                                                    |
| 1911.....                       | 99                                 | +1                                           | —2                                                   | 92                               | + 9                                          | — 1                                                  | 91                                  | +10                                          | — 3                                                  |
| 1912.....                       | 101                                | —1                                           | +2                                                   | 95                               | + 5                                          | + 3                                                  | 96                                  | + 4                                          | + 5                                                  |
| 1913.....                       | 102                                | —2                                           | +1                                                   | 104                              | — 4                                          | + 9                                                  | 106                                 | — 6                                          | +10                                                  |
| 1914.....                       | 101                                | —1                                           | —1                                                   | 95                               | + 5                                          | — 9                                                  | 96                                  | + 4                                          | — 9                                                  |
| 1915.....                       | 100                                | —                                            | —1                                                   | 100                              | —                                            | + 5                                                  | 100                                 | —                                            | + 4                                                  |
| <b>Mold cappers:</b>            |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                       | 105                                | —5                                           | —                                                    | 87                               | +15                                          | —                                                    | 91                                  | +10                                          | —                                                    |
| 1911.....                       | 101                                | —1                                           | —4                                                   | 86                               | +16                                          | — 1                                                  | 87                                  | +15                                          | — 4                                                  |
| 1912.....                       | 104                                | —4                                           | +3                                                   | 89                               | +12                                          | + 3                                                  | 93                                  | + 8                                          | + 7                                                  |
| 1913.....                       | 104                                | —4                                           | (1)                                                  | 101                              | — 1                                          | +13                                                  | 105                                 | — 5                                          | +13                                                  |
| 1914.....                       | 102                                | —2                                           | —2                                                   | 91                               | +10                                          | —10                                                  | 93                                  | + 8                                          | —11                                                  |
| 1915.....                       | 100                                | —                                            | —2                                                   | 100                              | —                                            | +10                                                  | 100                                 | —                                            | + 8                                                  |
| <b>Ladle cranimen:</b>          |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                       | 102                                | —2                                           | —                                                    | 89                               | +12                                          | —                                                    | 91                                  | +10                                          | —                                                    |
| 1911.....                       | 98                                 | +2                                           | —4                                                   | 87                               | +15                                          | — 2                                                  | 85                                  | +18                                          | — 7                                                  |
| 1912.....                       | 100                                | (1)                                          | +2                                                   | 96                               | + 4                                          | +10                                                  | 97                                  | + 3                                          | +14                                                  |
| 1913.....                       | 102                                | —2                                           | +2                                                   | 104                              | — 4                                          | + 8                                                  | 106                                 | — 6                                          | + 9                                                  |
| 1914.....                       | 101                                | —1                                           | —1                                                   | 93                               | + 8                                          | —11                                                  | 94                                  | + 6                                          | —11                                                  |
| 1915.....                       | 100                                | —                                            | —1                                                   | 100                              | —                                            | + 8                                                  | 100                                 | —                                            | + 6                                                  |
| <b>Ingot strippers:</b>         |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                       | 101                                | —1                                           | —                                                    | 92                               | + 9                                          | —                                                    | 91                                  | +10                                          | —                                                    |
| 1911.....                       | 98                                 | +2                                           | —3                                                   | 85                               | +18                                          | — 8                                                  | 83                                  | +20                                          | — 9                                                  |
| 1912.....                       | 99                                 | +1                                           | +1                                                   | 94                               | + 6                                          | +11                                                  | 92                                  | + 9                                          | +11                                                  |
| 1913.....                       | 101                                | —1                                           | +2                                                   | 100                              | (1)                                          | + 6                                                  | 101                                 | — 1                                          | +10                                                  |
| 1914.....                       | 99                                 | +1                                           | —2                                                   | 96                               | + 4                                          | — 4                                                  | 95                                  | + 5                                          | — 6                                                  |
| 1915.....                       | 100                                | —                                            | +1                                                   | 100                              | —                                            | + 4                                                  | 100                                 | —                                            | + 5                                                  |
| <b>Engineers, locomotive:</b>   |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                       | 101                                | —1                                           | —                                                    | 87                               | +15                                          | —                                                    | 88                                  | +14                                          | —                                                    |
| 1911.....                       | 97                                 | +3                                           | —4                                                   | 89                               | +12                                          | + 2                                                  | 86                                  | +16                                          | — 2                                                  |
| 1912.....                       | 98                                 | +2                                           | +1                                                   | 94                               | + 6                                          | + 6                                                  | 92                                  | + 9                                          | + 7                                                  |
| 1913.....                       | 100                                | (1)                                          | +2                                                   | 105                              | — 5                                          | +12                                                  | 104                                 | — 4                                          | +13                                                  |
| 1914.....                       | 99                                 | +1                                           | —1                                                   | 101                              | — 1                                          | — 4                                                  | 100                                 | (1)                                          | — 4                                                  |
| 1915.....                       | 100                                | —                                            | +1                                                   | 100                              | —                                            | — 1                                                  | 100                                 | (1)                                          | (1)                                                  |
| <b>Switchmen:</b>               |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                       | 101                                | —1                                           | —                                                    | 82                               | +22                                          | —                                                    | 83                                  | +20                                          | —                                                    |
| 1911.....                       | 97                                 | +3                                           | —4                                                   | 83                               | +20                                          | + 1                                                  | 80                                  | +25                                          | — 4                                                  |
| 1912.....                       | 97                                 | +3                                           | (1)                                                  | 88                               | +14                                          | + 6                                                  | 86                                  | +16                                          | + 8                                                  |
| 1913.....                       | 99                                 | +1                                           | +2                                                   | 102                              | — 2                                          | +16                                                  | 101                                 | — 1                                          | +17                                                  |
| 1914.....                       | 99                                 | +1                                           | (1)                                                  | 100                              | (1)                                          | — 2                                                  | 100                                 | (1)                                          | — 1                                                  |
| 1915.....                       | 100                                | —                                            | +1                                                   | 100                              | —                                            | (1)                                                  | 100                                 | —                                            | (1)                                                  |
| <b>Laborers:</b>                |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                       | 104                                | —4                                           | —                                                    | 84                               | +19                                          | —                                                    | 86                                  | +16                                          | — 2                                                  |
| 1911.....                       | 102                                | —2                                           | —2                                                   | 86                               | +16                                          | + 2                                                  | 87                                  | +15                                          | + 2                                                  |
| 1912.....                       | 104                                | —4                                           | +2                                                   | 87                               | +15                                          | + 1                                                  | 89                                  | +12                                          | + 1                                                  |
| 1913.....                       | 106                                | —6                                           | +2                                                   | 99                               | + 1                                          | +14                                                  | 104                                 | — 4                                          | +17                                                  |
| 1914.....                       | 98                                 | +2                                           | —8                                                   | 100                              | (1)                                          | + 1                                                  | 97                                  | + 3                                          | — 7                                                  |
| 1915.....                       | 100                                | —                                            | +2                                                   | 100                              | —                                            | (1)                                                  | 100                                 | —                                            | + 3                                                  |

<sup>1</sup> No change.

TABLE 20.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATIONS—OPEN-HEARTH FURNACES—Concluded.

| Occupation and year.        | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|-----------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                             | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in— |                                                      |
|                             |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| Unclassified—productive:    |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1914.....                   | 100                                | (1)                                          | .....                                                | 96                               | + 4                                          | .....                                                | 95                                  | + 5                                          | .....                                                |
| 1915.....                   | 100                                |                                              | (1)                                                  | 100                              |                                              | + 4                                                  | 100                                 |                                              | + 5                                                  |
| Unclassified—nonproductive: |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1914.....                   | 102                                | —2                                           | .....                                                | 97                               | + 3                                          | .....                                                | 100                                 | (1)                                          | .....                                                |
| 1915.....                   | 100                                |                                              | —2                                                   | 100                              |                                              | + 3                                                  | 100                                 |                                              | (1)                                                  |
| All occupations:            |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                   | 102                                | —2                                           | .....                                                | 86                               | +16                                          | .....                                                | 89                                  | +12                                          | .....                                                |
| 1911.....                   | 100                                | (1)                                          | —2                                                   | 86                               | +16                                          | (1)                                                  | 86                                  | +16                                          | — 3                                                  |
| 1912.....                   | 102                                | —2                                           | +2                                                   | 90                               | +11                                          | + 5                                                  | 91                                  | +10                                          | + 6                                                  |
| 1913.....                   | 103                                | —3                                           | +1                                                   | 98                               | + 2                                          | + 9                                                  | 101                                 | — 1                                          | +11                                                  |
| 1914.....                   | 100                                | (1)                                          | —3                                                   | 96                               | + 4                                          | — 2                                                  | 97                                  | + 3                                          | — 4                                                  |
| 1915.....                   | 100                                |                                              | (1)                                                  | 100                              |                                              | + 4                                                  | 100                                 |                                              | + 3                                                  |

<sup>1</sup> No change.

The relative full-time weekly earnings for all occupations combined, in 1910, were 89 as compared with 100 in 1915. In other words, the full-time weekly earnings in 1910 were 89 per cent of such earnings in 1915. The relative dropped to 86 in 1911, advanced to 91 in 1912, to 101 in 1913, dropped to 97 in 1914, and advanced to 100 in 1915, the base year. These relative numbers for each year previous to 1914 are based on the principal productive occupations only, but those for 1914 and 1915 include also the unclassified group tabulated for 1914 and 1915 for the first time.

The next column shows that full-time weekly earnings in 1915 were 12 per cent higher than in 1910, 16 per cent higher than in 1911, 10 per cent higher than in 1912, 1 per cent lower than in 1913, and 3 per cent higher than in 1914.

The third column under "Weekly earnings" shows the per cent of increase or decrease in full-time weekly earnings in each year as compared with the year immediately preceding. Thus, the full-time weekly earnings in 1911 were 3 per cent lower than in 1910, in 1912 6 per cent higher than in 1911, in 1913 11 per cent higher than in 1912, in 1914 4 per cent lower than in 1913, and in 1915 3 per cent higher than in 1914. The relative numbers and percentages for full-time hours per week and rates of wages per hour can be read in like manner.

## FULL-TIME WORKING DAYS PER WEEK.

The number and per cent of employees in the principal productive occupations in open-hearth plants whose customary working time per week was 5 days or turns, or 6 days, or 7 days, or variations thereof, are shown in Table 21.

The heading "5 days and 6 days alternately," for example, indicates that the plants were running 6 days and 5 nights each week, being shut down for one day and a half each week, and that the employees reported under this heading work 6 turns 1 week and 5 turns the next.

The figures are presented for each district and for the four districts combined, two sets of figures being given for the plants reported for 1914 and 1915, the first covering only the principal productive occupations, as shown for each of the preceding groups and therefore strictly comparable with them, and the second including the unclassified occupations (see pp. 55 and 56) tabulated for 1914 and 1915 for the first time.

TABLE 21.—NUMBER AND PER CENT OF EMPLOYEES IN EACH DISTRICT WORKING EACH SPECIFIED NUMBER OF DAYS PER WEEK, BY YEARS, 1910 TO 1915—*OPEN-HEARTH FURNACES*.

[The figures for each group of years are for identical plants.]

## NUMBER.

| District, and number of plants. | Year. | Number of employees. | Employees whose customary working time per week was— |                                |                  |                                |                                |                                         |                                         |         |
|---------------------------------|-------|----------------------|------------------------------------------------------|--------------------------------|------------------|--------------------------------|--------------------------------|-----------------------------------------|-----------------------------------------|---------|
|                                 |       |                      | 5 days.                                              | 5 days and 6 days alternately. | 6 days.          | 5 days and 7 days alternately. | 6 days and 7 days alternately. | 6 days, 6 days, and 7 days in rotation. | 6 days, 7 days, and 7 days in rotation. | 7 days. |
|                                 |       |                      |                                                      |                                |                  |                                |                                |                                         |                                         |         |
| Eastern:                        |       |                      |                                                      |                                |                  |                                |                                |                                         |                                         |         |
| 4 plants.....                   | 1910  | 583                  |                                                      | 207                            | 252              | 16                             | 24                             |                                         |                                         | 84      |
|                                 | 1911  | 469                  |                                                      | 83                             | 274              |                                | 26                             |                                         |                                         | 86      |
| 4 plants.....                   | 1911  | 477                  |                                                      | 83                             | 282              |                                | 26                             |                                         |                                         | 86      |
|                                 | 1912  | 480                  |                                                      | 55                             | 311              |                                | 26                             |                                         |                                         | 88      |
| 4 plants.....                   | 1912  | 471                  |                                                      | 55                             | 296              |                                | 26                             |                                         |                                         | 94      |
|                                 | 1913  | 490                  |                                                      | 62                             | 301              |                                | 28                             |                                         |                                         | 99      |
| 1 plants.....                   | 1913  | 480                  |                                                      | 62                             | 287              |                                | 32                             |                                         |                                         | 99      |
|                                 | 1914  | 357                  |                                                      |                                | 194              |                                | 92                             |                                         |                                         | 71      |
| 6 plants.....                   | 1914  | 491                  |                                                      |                                | 248              |                                | 154                            |                                         |                                         | 89      |
|                                 | 1915  | 516                  |                                                      |                                | 263              |                                | 149                            |                                         |                                         | 104     |
| 6 plants.....                   | 1914  | 1,064                |                                                      |                                | <sup>1</sup> 635 |                                | 215                            |                                         |                                         | 214     |
|                                 | 1915  | 1,116                | 2                                                    | 2                              | <sup>2</sup> 655 |                                | 225                            | 3                                       |                                         | 229     |
| Pittsburgh:                     |       |                      |                                                      |                                |                  |                                |                                |                                         |                                         |         |
| 5 plants.....                   | 1910  | 1,491                |                                                      |                                | 343              |                                | 837                            |                                         |                                         | 311     |
|                                 | 1911  | 1,432                |                                                      | 32                             | 558              | 32                             | 636                            | 3                                       |                                         | 171     |
|                                 | 1912  | 1,428                |                                                      |                                | 225              |                                | 881                            | 3                                       |                                         | 319     |
| 5 plants.....                   | 1912  | 1,452                |                                                      |                                | 225              |                                | 873                            | <sup>3</sup> 20                         | 3                                       | 331     |
|                                 | 1913  | 1,571                |                                                      |                                | 121              |                                | 879                            | <sup>3</sup> 60                         | <sup>4</sup> 50                         | 461     |
| 5 plants.....                   | 1913  | 1,474                |                                                      |                                | 106              |                                | 853                            | 40                                      | <sup>5</sup> 42                         | 433     |
|                                 | 1914  | 1,394                |                                                      |                                | 343              |                                | 689                            | 10                                      |                                         | 352     |

<sup>1</sup> Including 10 employees who worked 7 days every sixth week.

<sup>2</sup> Including 14 employees who worked 7 days every sixth week.

<sup>3</sup> Worked 7 days every fourth week.

<sup>4</sup> Including 47 employees who worked 6 days every fourth week.

<sup>5</sup> Worked 6 days every fourth week.



TABLE 21.—NUMBER AND PER CENT OF EMPLOYEES IN EACH DISTRICT WORKING EACH SPECIFIED NUMBER OF DAYS PER WEEK, BY YEARS, 1910 TO 1915—*OPEN-HEARTH FURNACES*—Continued.

NUMBER—Concluded.

| District, and number of plants. | Year. | Number of employees. | Employees whose customary working time per week was— |                                |                     |                                |                                |                                         |                                         |
|---------------------------------|-------|----------------------|------------------------------------------------------|--------------------------------|---------------------|--------------------------------|--------------------------------|-----------------------------------------|-----------------------------------------|
|                                 |       |                      | 5 days.                                              | 5 days and 6 days alternately. | 6 days.             | 5 days and 7 days alternately. | 6 days and 7 days alternately. | 6 days, 6 days, and 7 days in rotation. | 6 days, 7 days, and 7 days in rotation. |
| Pittsburgh—Concl'd.             |       |                      |                                                      |                                |                     |                                |                                |                                         |                                         |
| 6 plants.....                   | 1914  | 1,532                | .....                                                | .....                          | 375                 | .....                          | 697                            | 10                                      | 450                                     |
|                                 | 1915  | 1,409                | .....                                                | .....                          | 316                 | .....                          | 668                            | .....                                   | 425                                     |
| 6 plants.....                   | 1914  | 2,149                | .....                                                | .....                          | 468                 | .....                          | 852                            | 10                                      | 1,819                                   |
|                                 | 1915  | 2,013                | .....                                                | .....                          | <sup>2</sup> 404    | .....                          | 814                            | .....                                   | <sup>3</sup> 795                        |
| Great Lakes and Middle West:    |       |                      |                                                      |                                |                     |                                |                                |                                         |                                         |
| 6 plants.....                   | 1910  | 975                  | .....                                                | .....                          | 340                 | .....                          | 63                             | .....                                   | 572                                     |
|                                 | 1911  | 941                  | .....                                                | .....                          | 461                 | .....                          | 263                            | .....                                   | 217                                     |
|                                 | 1912  | 1,020                | .....                                                | .....                          | 517                 | .....                          | 204                            | .....                                   | 299                                     |
| 6 plants.....                   | 1912  | 1,073                | .....                                                | .....                          | 477                 | .....                          | 182                            | .....                                   | 414                                     |
|                                 | 1913  | 1,171                | .....                                                | .....                          | <sup>4</sup> 422    | .....                          | 168                            | 15                                      | 566                                     |
| 6 plants.....                   | 1913  | 1,039                | .....                                                | .....                          | <sup>4</sup> 340    | .....                          | 168                            | .....                                   | 531                                     |
|                                 | 1914  | 1,001                | .....                                                | .....                          | 391                 | .....                          | 214                            | .....                                   | 396                                     |
| 7 plants.....                   | 1914  | 1,069                | .....                                                | .....                          | 394                 | .....                          | 274                            | .....                                   | 401                                     |
|                                 | 1915  | 1,122                | .....                                                | .....                          | 405                 | .....                          | 304                            | .....                                   | 413                                     |
| 7 plants.....                   | 1914  | 1,632                | .....                                                | .....                          | 751                 | .....                          | 311                            | .....                                   | 570                                     |
|                                 | 1915  | 1,755                | .....                                                | .....                          | 846                 | .....                          | 356                            | .....                                   | 553                                     |
| Southern:                       |       |                      |                                                      |                                |                     |                                |                                |                                         |                                         |
| 2 plants.....                   | 1910  | 292                  | .....                                                | .....                          | 188                 | .....                          | .....                          | .....                                   | 104                                     |
|                                 | 1911  | 223                  | .....                                                | .....                          | 100                 | .....                          | 58                             | .....                                   | 65                                      |
|                                 | 1912  | 254                  | .....                                                | .....                          | 98                  | .....                          | 68                             | .....                                   | 88                                      |
| 2 plants.....                   | 1912  | 250                  | .....                                                | .....                          | 86                  | .....                          | 70                             | 6                                       | 88                                      |
|                                 | 1913  | 266                  | .....                                                | .....                          | 126                 | .....                          | 62                             | 6                                       | 72                                      |
| 2 plants.....                   | 1913  | 251                  | .....                                                | .....                          | 124                 | .....                          | 51                             | .....                                   | 73                                      |
|                                 | 1914  | 201                  | .....                                                | .....                          | 82                  | .....                          | 34                             | 6                                       | 79                                      |
| 3 plants.....                   | 1914  | 333                  | .....                                                | .....                          | 163                 | .....                          | 34                             | 6                                       | 130                                     |
|                                 | 1915  | 311                  | .....                                                | .....                          | 126                 | .....                          | 50                             | .....                                   | 135                                     |
| 3 plants.....                   | 1914  | 570                  | .....                                                | .....                          | 269                 | .....                          | 38                             | 9                                       | 254                                     |
|                                 | 1915  | 539                  | .....                                                | .....                          | 226                 | .....                          | 58                             | 3                                       | 252                                     |
| Total:                          |       |                      |                                                      |                                |                     |                                |                                |                                         |                                         |
| 17 plants.....                  | 1910  | 3,341                | .....                                                | 207                            | 1,123               | 16                             | 924                            | .....                                   | 1,071                                   |
|                                 | 1911  | 3,065                | .....                                                | 115                            | 1,393               | 32                             | 983                            | 3                                       | 539                                     |
| 17 plants.....                  | 1911  | 3,073                | .....                                                | 115                            | 1,401               | 32                             | 983                            | 3                                       | 539                                     |
|                                 | 1912  | 3,182                | .....                                                | 55                             | 1,151               | .....                          | 1,179                          | 3                                       | 794                                     |
| 17 plants.....                  | 1912  | 3,246                | .....                                                | 55                             | 1,084               | .....                          | 1,151                          | <sup>5</sup> 20                         | 927                                     |
|                                 | 1913  | 3,498                | .....                                                | 62                             | <sup>4</sup> 970    | .....                          | 1,137                          | <sup>6</sup> 75                         | 1,198                                   |
| 17 plants.....                  | 1913  | 3,244                | .....                                                | 62                             | <sup>4</sup> 857    | .....                          | 1,107                          | 40                                      | 1,136                                   |
|                                 | 1914  | 2,953                | .....                                                | .....                          | 1,010               | .....                          | 1,029                          | 10                                      | 898                                     |
| 22 plants.....                  | 1914  | 3,425                | .....                                                | .....                          | 1,180               | .....                          | 1,159                          | 10                                      | 1,070                                   |
|                                 | 1915  | 3,358                | .....                                                | .....                          | 1,110               | .....                          | 1,171                          | .....                                   | 1,077                                   |
| 22 plants.....                  | 1914  | 5,415                | .....                                                | .....                          | <sup>9</sup> 2,123  | .....                          | 1,416                          | 10                                      | <sup>1</sup> 1,857                      |
|                                 | 1915  | 5,423                | 2                                                    | 2                              | <sup>10</sup> 2,131 | .....                          | 1,453                          | 3                                       | <sup>3</sup> 1,829                      |

<sup>1</sup> Including 121 employees who worked 6 days 3 months of the year, and 16 employees who worked 6 days for 7 weeks and 7 days the eighth week of each 8-week period during 3 months of the year.

<sup>2</sup> Including 10 employees who worked 6 days for 7 weeks and 7 days for 3 weeks during each 10-week period.

<sup>3</sup> Including 131 employees who worked 6 days for 3 months during the year, and 16 employees who worked 6 days for 7 weeks and 7 days the eighth week of each 8-week period during 3 months of the year.

<sup>4</sup> Including 6 employees who worked 7 days every sixth week.

<sup>5</sup> Worked 7 days every fourth week.

<sup>6</sup> Including 60 employees who worked 7 days every fourth week.

<sup>7</sup> Including 47 employees who worked 6 days every fourth week.

<sup>8</sup> Worked 6 days every fourth week.

<sup>9</sup> Including 10 employees who worked 6 days every fourth week.

<sup>10</sup> Including 14 employees who worked 7 days every sixth week, and 10 employees who worked 6 days for 7 weeks and 7 days for 3 weeks during each 10-week period.

TABLE 21.—NUMBER AND PER CENT OF EMPLOYEES IN EACH DISTRICT WORKING EACH SPECIFIED NUMBER OF DAYS PER WEEK, BY YEARS, 1910 TO 1915—*OPEN-HEARTH FURNACES*—Continued.

## PER CENT.

| District, and number of plants. | Year. | Number of employees. | Employees whose customary working time per week was— |                                |         |                                |                                |                                         |                                         |
|---------------------------------|-------|----------------------|------------------------------------------------------|--------------------------------|---------|--------------------------------|--------------------------------|-----------------------------------------|-----------------------------------------|
|                                 |       |                      | 5 days.                                              | 5 days and 6 days alternately. | 6 days. | 5 days and 7 days alternately. | 6 days and 7 days alternately. | 6 days, 6 days, and 7 days in rotation. | 6 days, 7 days, and 7 days in rotation. |
| Eastern:                        |       |                      |                                                      |                                |         |                                |                                |                                         |                                         |
| 4 plants.....                   | 1910  | 583                  | .....                                                | 36                             | 43      | 3                              | 4                              | .....                                   | 14                                      |
|                                 | 1911  | 469                  | .....                                                | 18                             | 58      | .....                          | 6                              | .....                                   | 18                                      |
| 4 plants.....                   | 1911  | 477                  | .....                                                | 17                             | 59      | .....                          | 6                              | .....                                   | 18                                      |
|                                 | 1912  | 480                  | .....                                                | 12                             | 65      | .....                          | 5                              | .....                                   | 18                                      |
| 4 plants.....                   | 1912  | 471                  | .....                                                | 12                             | 63      | .....                          | 6                              | .....                                   | 20                                      |
|                                 | 1913  | 490                  | .....                                                | 13                             | 61      | .....                          | 6                              | .....                                   | 20                                      |
| 4 plants.....                   | 1913  | 480                  | .....                                                | 13                             | 60      | .....                          | 7                              | .....                                   | 21                                      |
|                                 | 1914  | 357                  | .....                                                | .....                          | 54      | .....                          | 26                             | .....                                   | 20                                      |
| 6 plants.....                   | 1914  | 491                  | .....                                                | .....                          | 51      | .....                          | 31                             | .....                                   | 18                                      |
|                                 | 1915  | 516                  | .....                                                | .....                          | 51      | .....                          | 29                             | .....                                   | 20                                      |
| 6 plants.....                   | 1914  | 1,064                | .....                                                | .....                          | 60      | .....                          | 20                             | .....                                   | 20                                      |
|                                 | 1915  | 1,116                | ( <sup>1</sup> )                                     | ( <sup>1</sup> )               | 59      | .....                          | 20                             | ( <sup>1</sup> )                        | 21                                      |
| Pittsburgh:                     |       |                      |                                                      |                                |         |                                |                                |                                         |                                         |
| 5 plants.....                   | 1910  | 1,491                | .....                                                | .....                          | 23      | .....                          | 56                             | .....                                   | 21                                      |
|                                 | 1911  | 1,432                | .....                                                | 2                              | 39      | 2                              | 44                             | ( <sup>1</sup> )                        | 12                                      |
|                                 | 1912  | 1,428                | .....                                                | .....                          | 16      | .....                          | 62                             | ( <sup>1</sup> )                        | 22                                      |
| 5 plants.....                   | 1912  | 1,452                | .....                                                | .....                          | 16      | .....                          | 60                             | 1                                       | ( <sup>1</sup> )                        |
|                                 | 1913  | 1,571                | .....                                                | .....                          | 8       | .....                          | 56                             | 4                                       | 3                                       |
| 5 plants.....                   | 1913  | 1,474                | .....                                                | .....                          | 7       | .....                          | 58                             | 3                                       | 29                                      |
|                                 | 1914  | 1,394                | .....                                                | .....                          | 25      | .....                          | 49                             | 1                                       | 25                                      |
| 6 plants.....                   | 1914  | 1,532                | .....                                                | .....                          | 24      | .....                          | 45                             | 1                                       | 29                                      |
|                                 | 1915  | 1,409                | .....                                                | .....                          | 22      | .....                          | 47                             | .....                                   | 30                                      |
| 6 plants.....                   | 1914  | 2,149                | .....                                                | .....                          | 22      | .....                          | 40                             | ( <sup>1</sup> )                        | 38                                      |
|                                 | 1915  | 2,013                | .....                                                | .....                          | 20      | .....                          | 40                             | .....                                   | 39                                      |
| Great Lakes and Middle West:    |       |                      |                                                      |                                |         |                                |                                |                                         |                                         |
| 6 plants.....                   | 1910  | 975                  | .....                                                | .....                          | 35      | .....                          | 7                              | .....                                   | 59                                      |
|                                 | 1911  | 941                  | .....                                                | .....                          | 49      | .....                          | 28                             | .....                                   | 23                                      |
|                                 | 1912  | 1,020                | .....                                                | .....                          | 51      | .....                          | 20                             | .....                                   | 29                                      |
| 6 plants.....                   | 1912  | 1,073                | .....                                                | .....                          | 45      | .....                          | 17                             | .....                                   | 39                                      |
|                                 | 1913  | 1,171                | .....                                                | .....                          | 36      | .....                          | 14                             | 1                                       | 48                                      |
| 6 plants.....                   | 1913  | 1,039                | .....                                                | .....                          | 33      | .....                          | 16                             | .....                                   | 51                                      |
|                                 | 1914  | 1,001                | .....                                                | .....                          | 39      | .....                          | 21                             | .....                                   | 40                                      |
| 7 plants.....                   | 1914  | 1,069                | .....                                                | .....                          | 37      | .....                          | 26                             | .....                                   | 38                                      |
|                                 | 1915  | 1,122                | .....                                                | .....                          | 36      | .....                          | 27                             | .....                                   | 37                                      |
| 7 plants.....                   | 1914  | 1,632                | .....                                                | .....                          | 46      | .....                          | 19                             | .....                                   | 35                                      |
|                                 | 1915  | 1,755                | .....                                                | .....                          | 48      | .....                          | 20                             | .....                                   | 32                                      |
| Southern:                       |       |                      |                                                      |                                |         |                                |                                |                                         |                                         |
| 2 plants.....                   | 1910  | 292                  | .....                                                | .....                          | 64      | .....                          | .....                          | .....                                   | 36                                      |
|                                 | 1911  | 223                  | .....                                                | .....                          | 45      | .....                          | 26                             | .....                                   | 29                                      |
|                                 | 1912  | 254                  | .....                                                | .....                          | 39      | .....                          | 27                             | .....                                   | 35                                      |
| 2 plants.....                   | 1912  | 250                  | .....                                                | .....                          | 34      | .....                          | 28                             | .....                                   | 35                                      |
|                                 | 1913  | 266                  | .....                                                | .....                          | 47      | .....                          | 23                             | 2                                       | 27                                      |
| 2 plants.....                   | 1913  | 251                  | .....                                                | .....                          | 49      | .....                          | 22                             | .....                                   | 29                                      |
|                                 | 1914  | 201                  | .....                                                | .....                          | 41      | .....                          | 17                             | 3                                       | 39                                      |
| 3 plants.....                   | 1914  | 333                  | .....                                                | .....                          | 49      | .....                          | 10                             | 2                                       | 39                                      |
|                                 | 1915  | 311                  | .....                                                | .....                          | 41      | .....                          | 16                             | .....                                   | 43                                      |
| 3 plants.....                   | 1914  | 570                  | .....                                                | .....                          | 47      | .....                          | 7                              | 2                                       | 45                                      |
|                                 | 1915  | 539                  | .....                                                | .....                          | 42      | .....                          | 11                             | 1                                       | 47                                      |

<sup>1</sup> Less than one-half of 1 per cent.

TABLE 21.—NUMBER AND PER CENT OF EMPLOYEES IN EACH DISTRICT WORKING EACH SPECIFIED NUMBER OF DAYS PER WEEK, BY YEARS, 1910 TO 1915—*OPEN-HEARTH FURNACES*—Concluded.

PER CENT—Concluded.

| District, and number of plants. | Year. | Number of employees. | Employees whose customary working time per week was— |                                |         |                                |                                |                                         |                                         |         |
|---------------------------------|-------|----------------------|------------------------------------------------------|--------------------------------|---------|--------------------------------|--------------------------------|-----------------------------------------|-----------------------------------------|---------|
|                                 |       |                      | 5 days.                                              | 5 days and 6 days alternately. | 6 days. | 5 days and 7 days alternately. | 6 days and 7 days alternately. | 6 days, 6 days, and 7 days in rotation. | 6 days, 7 days, and 7 days in rotation. | 7 days. |
| Total:                          |       |                      |                                                      |                                |         |                                |                                |                                         |                                         |         |
| 17 plants.....                  | 1910  | 3,341                | .....                                                | 6                              | 34      | 1                              | 28                             | .....                                   | .....                                   | 32      |
|                                 | 1911  | 3,065                | .....                                                | 4                              | 45      | 1                              | 32                             | (1)                                     | .....                                   | 18      |
| 17 plants.....                  | 1911  | 3,073                | .....                                                | 4                              | 46      | 1                              | 32                             | (1)                                     | .....                                   | 18      |
|                                 | 1912  | 3,182                | .....                                                | 2                              | 36      | .....                          | 37                             | (1)                                     | .....                                   | 25      |
| 17 plants.....                  | 1912  | 3,246                | .....                                                | 2                              | 33      | .....                          | 36                             | 1                                       | (1)                                     | 29      |
|                                 | 1913  | 3,498                | .....                                                | 2                              | 28      | .....                          | 33                             | 2                                       | 2                                       | 34      |
| 17 plants.....                  | 1913  | 3,244                | .....                                                | 2                              | 26      | .....                          | 34                             | 1                                       | 1                                       | 35      |
|                                 | 1914  | 2,953                | .....                                                | .....                          | 34      | .....                          | 35                             | (1)                                     | (1)                                     | 30      |
| 22 plants.....                  | 1914  | 3,425                | .....                                                | .....                          | 34      | .....                          | 34                             | (1)                                     | (1)                                     | 31      |
|                                 | 1915  | 3,358                | .....                                                | .....                          | 33      | .....                          | 35                             | .....                                   | .....                                   | 32      |
| 22 plants.....                  | 1914  | 5,415                | .....                                                | .....                          | 39      | .....                          | 26                             | (1)                                     | (1)                                     | 34      |
|                                 | 1915  | 5,423                | (1)                                                  | (1)                            | 39      | .....                          | 27                             | (1)                                     | (1)                                     | 34      |

<sup>1</sup> Less than one-half of 1 per cent.

Two general tables are presented for the open-hearth department, as follows:

Table E.—Full-time hours per week, rates of wages per hour, and full-time weekly earnings, in the United States, by years, 1910 to 1915.

Table F.—Full-time hours per week, rates of wages per hour, and full-time weekly earnings, in each district, by years, 1913 to 1915.

The data from Table E are summarized in Table 19, percentages being used instead of the actual figures for classified hours and rates of wages per hour.

The order in which the occupations are given in Tables E and F, and in the table of relative numbers, follows that of the processes of manufacture. "Identical plants," as used in the tables of this report, are identical units of identical establishments reporting the same occupations in each of the two or more consecutive years. For a more extended explanation see page 58.

Figures for each geographical division for each preceding year, back to 1910, corresponding to those given for 1913, 1914, and 1915 in Table F, were given in Bulletins 151 and 168 of this bureau. Descriptions of occupations which appear in the tables of this chapter and of others included in the two unclassified groups may be found in the Glossary of Occupations, on pages 481 to 484.

## 160 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

TABLE E.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1910 TO 1915—

[The figures for each group of

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |     |                      |     |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|-----|----------------------|-----|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72  | Over 72 and under 84 | 84  |
| 1        | Stockers:                         | 1910  | 448                  | 76.8                              | \$0.177                         | \$13.69                            |                                                |                      |                 |    | 60                   | 107 | 154                  | 127 |
| 2        | 17 plants.....                    | 1911  | 419                  | 74.4                              | .172                            | 12.73                              |                                                |                      |                 | 13 | 109                  | 102 | 116                  | 79  |
| 3        |                                   | 1912  | 403                  | 76.6                              | .176                            | 13.49                              |                                                |                      |                 |    | 26                   | 122 | 155                  | 100 |
| 4        | 17 plants.....                    | 1912  | 413                  | 77.0                              | .176                            | 13.51                              |                                                |                      |                 |    | 30                   | 102 | 165                  | 116 |
| 5        |                                   | 1913  | 417                  | 77.8                              | .197                            | 15.30                              |                                                |                      |                 |    | 32                   | 90  | 167                  | 128 |
| 6        | 17 plants.....                    | 1913  | 411                  | 77.7                              | .198                            | 15.37                              |                                                |                      |                 |    | 32                   | 90  | 167                  | 122 |
| 7        |                                   | 1914  | 355                  | 76.7                              | .205                            | 15.66                              |                                                |                      |                 | 1  | 32                   | 75  | 160                  | 87  |
| 8        | 22 plants.....                    | 1914  | 409                  | 77.0                              | .204                            | 15.66                              |                                                |                      |                 | 1  | 32                   | 85  | 196                  | 195 |
| 9        |                                   | 1915  | 366                  | 77.3                              | .199                            | 15.41                              |                                                |                      |                 | 7  | 30                   | 78  | 140                  | 111 |
| 10       | Stock cranimen:                   | 1910  | 75                   | 78.8                              | .223                            | 17.60                              |                                                | 1                    |                 |    | 2                    | 12  | 30                   | 30  |
| 11       | 13 plants.....                    | 1911  | 70                   | 75.6                              | .207                            | 15.61                              |                                                | 1                    |                 |    | 16                   | 7   | 30                   | 16  |
| 12       |                                   | 1912  | 66                   | 77.7                              | .235                            | 18.29                              |                                                |                      |                 |    |                      | 12  | 34                   | 20  |
| 13       | 14 plants.....                    | 1912  | 72                   | 78.9                              | .228                            | 18.02                              |                                                |                      |                 |    |                      | 8   | 34                   | 30  |
| 14       |                                   | 1913  | 80                   | 79.6                              | .239                            | 19.01                              |                                                |                      |                 |    |                      | 8   | 38                   | 34  |
| 15       | 15 plants.....                    | 1913  | 84                   | 79.1                              | .238                            | 18.85                              |                                                |                      |                 |    | 4                    | 8   | 38                   | 34  |
| 16       |                                   | 1914  | 80                   | 78.3                              | .239                            | 18.70                              |                                                |                      |                 |    | 4                    | 10  | 34                   | 32  |
| 17       | 20 plants.....                    | 1914  | 98                   | 78.4                              | .237                            | 18.58                              |                                                |                      |                 |    | 4                    | 12  | 48                   | 34  |
| 18       |                                   | 1915  | 94                   | 77.4                              | .253                            | 19.77                              |                                                |                      |                 |    | 4                    | 22  | 44                   | 24  |
| 19       | Charging-machine operators:       | 1910  | 73                   | 76.8                              | .294                            | 22.52                              |                                                |                      |                 |    | 6                    | 25  | 20                   | 22  |
| 20       | 17 plants.....                    | 1911  | 72                   | 74.7                              | .287                            | 21.37                              |                                                |                      |                 |    | 18                   | 18  | 24                   | 12  |
| 21       |                                   | 1912  | 72                   | 75.5                              | .312                            | 23.56                              |                                                |                      |                 |    | 10                   | 28  | 18                   | 16  |
| 22       | 17 plants.....                    | 1912  | 72                   | 75.8                              | .312                            | 23.67                              |                                                |                      |                 |    | 10                   | 26  | 18                   | 18  |
| 23       |                                   | 1913  | 76                   | 78.0                              | .335                            | 26.12                              |                                                |                      |                 |    | 10                   | 12  | 24                   | 30  |
| 24       |                                   | 1914  | 74                   | 77.0                              | .309                            | 23.66                              |                                                |                      |                 |    | 4                    | 28  | 18                   | 24  |
| 25       | 22 plants.....                    | 1914  | 86                   | 77.4                              | .307                            | 23.66                              |                                                |                      |                 |    | 4                    | 28  | 28                   | 26  |
| 26       |                                   | 1915  | 86                   | 77.7                              | .330                            | 25.55                              |                                                |                      |                 |    | 4                    | 26  | 28                   | 28  |
| 27       | Door operators:                   | 1910  | 165                  | 75.9                              | .101                            | 7.72                               |                                                |                      |                 |    | 20                   | 63  | 36                   | 46  |
| 28       | 15 plants.....                    | 1911  | 160                  | 75.5                              | .100                            | 7.53                               |                                                |                      |                 |    | 34                   | 38  | 50                   | 38  |
| 29       |                                   | 1912  | 157                  | 76.0                              | .102                            | 7.72                               |                                                |                      |                 |    | 32                   | 44  | 33                   | 48  |
| 30       | 15 plants.....                    | 1912  | 155                  | 76.4                              | .100                            | 7.68                               |                                                |                      |                 |    | 32                   | 38  | 33                   | 52  |
| 31       |                                   | 1913  | 160                  | 76.9                              | .112                            | 8.68                               |                                                |                      |                 |    | 32                   | 30  | 44                   | 54  |
| 32       |                                   | 1914  | 148                  | 76.8                              | .108                            | 8.30                               |                                                |                      |                 |    | 24                   | 36  | 42                   | 46  |
| 33       | 19 plants.....                    | 1914  | 170                  | 77.0                              | .109                            | 8.35                               |                                                |                      |                 |    | 24                   | 40  | 54                   | 52  |
| 34       |                                   | 1915  | 176                  | 76.5                              | .111                            | 8.43                               |                                                |                      |                 |    | 24                   | 44  | 66                   | 42  |
| 35       | Melters' helpers, first:          | 1910  | 341                  | 77.7                              | .416                            | 32.27                              |                                                |                      |                 |    | 24                   | 75  | 136                  | 106 |
| 36       | 17 plants.....                    | 1911  | 338                  | 75.3                              | .400                            | 30.12                              |                                                |                      |                 |    | 58                   | 72  | 164                  | 44  |
| 37       |                                   | 1912  | 347                  | 76.5                              | .417                            | 31.89                              |                                                |                      |                 |    | 8                    | 82  | 191                  | 66  |
| 38       | 17 plants.....                    | 1912  | 345                  | 76.8                              | .417                            | 31.99                              |                                                |                      |                 |    | 8                    | 72  | 191                  | 74  |
| 39       |                                   | 1913  | 364                  | 77.1                              | .440                            | 33.89                              |                                                |                      |                 |    | 10                   | 60  | 200                  | 94  |
| 40       |                                   | 1914  | 354                  | 74.8                              | .424                            | 31.59                              |                                                |                      | 36              |    |                      | 56  | 216                  | 46  |
| 41       | 22 plants.....                    | 1914  | 404                  | 75.6                              | .420                            | 31.60                              |                                                |                      | 36              |    |                      | 56  | 206                  | 62  |
| 42       |                                   | 1915  | 422                  | 75.5                              | .437                            | 32.80                              |                                                |                      | 42              |    |                      | 56  | 264                  | 60  |
| 43       | Melters' helpers, second:         | 1910  | 339                  | 76.6                              | .272                            | 20.87                              |                                                |                      |                 |    | 28                   | 129 | 76                   | 106 |
| 44       | 17 plants.....                    | 1911  | 335                  | 74.5                              | .263                            | 19.62                              |                                                |                      |                 |    | 118                  | 71  | 70                   | 76  |
| 45       |                                   | 1912  | 347                  | 75.8                              | .274                            | 20.77                              |                                                |                      |                 |    | 68                   | 129 | 50                   | 100 |
| 46       | 17 plants.....                    | 1912  | 345                  | 76.1                              | .275                            | 20.98                              |                                                |                      |                 |    | 68                   | 119 | 50                   | 108 |
| 47       |                                   | 1913  | 360                  | 76.7                              | .292                            | 22.36                              |                                                |                      |                 |    | 70                   | 106 | 50                   | 134 |
| 48       |                                   | 1914  | 352                  | 74.1                              | .280                            | 20.67                              |                                                |                      | 36              |    |                      | 100 | 74                   | 82  |
| 49       | 22 plants.....                    | 1914  | 402                  | 74.7                              | .278                            | 20.70                              |                                                |                      | 36              |    | 60                   | 100 | 118                  | 88  |
| 50       |                                   | 1915  | 420                  | 74.5                              | .291                            | 21.57                              |                                                |                      | 42              |    | 58                   | 102 | 130                  | 88  |

<sup>1</sup> Including 1 employee whose full time hours per week were 89.

AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
OPEN-HEARTH FURNACES.

years are for identical plants.]

| Employees whose rate of wages per hour were— |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | Line No.       |
|----------------------------------------------|--------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-------------------|----------------|
| 7 and under 8 cts.                           | 8 and under 9 cts. | 9 and under 10 cts. | 10 and under 12 cts. | 12 and under 14 cts. | 14 and under 16 cts. | 16 and under 18 cts. | 18 and under 20 cts. | 20 and under 25 cts. | 25 and under 30 cts. | 30 and under 40 cts. | 40 and under 50 cts. | 50 and under 60 cts. | 60 and under 70 cts. | 70 cts. and over. |                |
|                                              |                    |                     |                      |                      | 26<br>3<br>6         | 121<br>155<br>120    | 83<br>103<br>159     | 76<br>142<br>28      | 142<br>16<br>72      | 18                   |                      |                      |                      |                   | 1<br>2<br>3    |
|                                              |                    |                     |                      |                      | 10<br>6              | 120                  | 155<br>122           | 54<br>123            | 56<br>134            | 18<br>32             |                      |                      |                      |                   | 4<br>5         |
|                                              |                    |                     |                      |                      |                      |                      | 122<br>124           | 123<br>82            | 134<br>84            | 32<br>44             |                      |                      |                      |                   | 6<br>7         |
|                                              |                    |                     |                      |                      |                      | 1<br>2               | 132<br>94            | 104<br>101           | 108<br>157           | 44<br>12             | 20                   |                      |                      |                   | 8<br>9         |
|                                              |                    |                     |                      |                      |                      |                      | 5<br>5<br>4          | 6<br>12<br>4         | 50<br>53<br>32       | 14                   |                      |                      |                      |                   | 10<br>11<br>12 |
|                                              |                    |                     |                      |                      |                      |                      | 12<br>4              | 32<br>6              | 24<br>53             |                      | 2                    |                      |                      |                   | 13<br>14       |
|                                              |                    |                     |                      |                      |                      |                      |                      | 6<br>1               | 57<br>58             | 19<br>21             | 2                    |                      |                      |                   | 15<br>16       |
|                                              |                    |                     |                      |                      |                      |                      | 5<br>5               | 66<br>47             | 27<br>34             |                      | 3                    | 5                    |                      |                   | 17<br>18       |
|                                              |                    |                     |                      |                      |                      |                      |                      | 4<br>4<br>4          | 2<br>10<br>2         | 35<br>26<br>16       | 26<br>22<br>50       | 6<br>6               |                      |                   | 19<br>20<br>21 |
|                                              |                    |                     |                      |                      |                      |                      | 4                    | 2<br>4<br>12         | 14<br>20<br>27       | 52<br>42<br>33       |                      | 10<br>2              |                      |                   | 22<br>23<br>24 |
|                                              |                    |                     |                      |                      |                      |                      |                      | 14<br>12             | 29<br>18             | 41<br>38             | 2<br>18              |                      |                      |                   | 25<br>26       |
| 10                                           | 46                 | 29                  | 52                   | 14                   | 14                   |                      |                      |                      |                      |                      |                      |                      |                      |                   | 27             |
| 10                                           | 54                 | 10                  | 62                   | 24                   |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | 28             |
| 10                                           | 43                 | 8                   | 70                   | 26                   |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | 29             |
|                                              | 43                 | 12                  | 70                   | 20                   |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | 30             |
|                                              | 2                  | 50                  | 48                   | 40                   | 20                   |                      |                      |                      |                      |                      |                      |                      |                      |                   | 31             |
|                                              | 12                 | 38                  | 46                   | 46                   | 6                    |                      |                      |                      |                      |                      |                      |                      |                      |                   | 32             |
|                                              | 12                 | 44                  | 54                   | 54                   | 6                    |                      |                      |                      |                      |                      |                      |                      |                      |                   | 33             |
|                                              | 18                 | 34                  | 72                   | 32                   | 15                   | 5                    |                      |                      |                      |                      |                      |                      |                      |                   | 34             |
|                                              |                    |                     |                      |                      |                      |                      |                      |                      |                      | 12<br>28<br>17       | 124<br>135<br>105    | 169<br>143<br>175    | 36<br>26<br>46       |                   | 35<br>36<br>37 |
|                                              |                    |                     |                      |                      |                      |                      |                      |                      | 2                    | 17<br>9<br>19        | 109<br>154<br>155    | 171<br>96<br>46      | 46<br>4              |                   | 38<br>39<br>40 |
|                                              |                    |                     |                      |                      |                      |                      |                      |                      |                      | 19<br>2              | 155<br>134           | 174<br>184           | 46<br>98             | 10<br>2           | 41<br>42       |
|                                              |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | 43             |
|                                              |                    |                     |                      |                      |                      |                      | 18<br>21<br>15       | 84<br>107<br>72      | 137<br>130<br>154    | 100<br>73<br>99      |                      |                      |                      |                   | 44<br>45       |
|                                              |                    |                     |                      |                      |                      |                      | 5<br>4<br>2          | 15<br>78<br>12       | 64<br>108<br>88      | 162<br>168<br>136    | 99<br>2<br>109       |                      |                      |                   | 46<br>47<br>48 |
|                                              |                    |                     |                      |                      |                      |                      | 2                    | 12<br>2              | 112<br>120           | 148<br>105           | 123<br>186           | 5<br>7               |                      |                   | 49<br>50       |

TABLE E.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1910 TO 1915—OPEN—

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |     |                      |     |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|-----|----------------------|-----|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72  | Over 72 and under 84 | 84  |
|          | Melters' helpers, third:          |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |     |
| 1        | 17 plants.....                    | 1910  | 393                  | 76.5                              | \$0.196                         | \$14.97                            |                                                |                      |                 |    | 30                   | 141 | 116                  | 106 |
| 2        |                                   | 1911  | 394                  | 73.9                              | .185                            | 13.67                              |                                                |                      |                 |    | 78                   | 144 | 142                  | 30  |
| 3        |                                   | 1912  | 414                  | 75.4                              | .199                            | 15.01                              |                                                |                      |                 |    | 28                   | 126 | 192                  | 68  |
| 4        | 16 plants.....                    | 1912  | 390                  | 75.8                              | .200                            | 15.17                              |                                                |                      |                 |    | 8                    | 110 | 196                  | 76  |
| 5        |                                   | 1913  | 416                  | 77.6                              | .217                            | 16.86                              |                                                |                      |                 |    | 4                    | 108 | 166                  | 138 |
| 6        | 16 plants.....                    | 1913  | 458                  | 77.9                              | .214                            | 16.64                              |                                                |                      |                 |    | 4                    | 114 | 174                  | 166 |
| 7        |                                   | 1914  | 392                  | 77.3                              | .207                            | 16.04                              |                                                |                      |                 |    |                      | 164 | 98                   | 130 |
| 8        | 21 plants.....                    | 1914  | 442                  | 77.4                              | .207                            | 15.98                              |                                                |                      |                 |    |                      | 174 | 132                  | 136 |
| 9        |                                   | 1915  | 454                  | 77.7                              | .212                            | 16.44                              |                                                |                      |                 |    |                      | 174 | 130                  | 150 |
| 10       | Stopper setters:                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |     |
| 11       | 10 plants.....                    | 1910  | 30                   | 76.2                              | .313                            | 23.63                              |                                                |                      |                 |    |                      | 11  | 17                   | 2   |
| 12       |                                   | 1911  | 29                   | 73.5                              | .313                            | 23.11                              |                                                |                      |                 |    | 8                    | 6   | 15                   | 2   |
| 13       |                                   | 1912  | 29                   | 75.8                              | .329                            | 24.92                              |                                                |                      |                 |    |                      | 6   | 21                   | 2   |
| 14       | 8 plants.....                     | 1912  | 26                   | 76.0                              | .326                            | 24.80                              |                                                |                      |                 |    |                      | 4   | 20                   | 2   |
| 15       |                                   | 1913  | 26                   | 76.7                              | .363                            | 27.78                              |                                                |                      |                 |    |                      | 4   | 22                   |     |
| 16       | 9 plants.....                     | 1913  | 30                   | 77.3                              | .325                            | 25.10                              |                                                |                      |                 |    |                      | 4   | 24                   | 2   |
| 17       |                                   | 1914  | 30                   | 74.4                              | .292                            | 21.67                              |                                                |                      |                 |    |                      | 20  | 8                    | 2   |
| 18       | 10 plants.....                    | 1914  | 32                   | 75.0                              | .287                            | 21.46                              |                                                |                      |                 |    |                      | 20  | 8                    | 4   |
| 19       |                                   | 1915  | 32                   | 74.6                              | .296                            | 21.96                              |                                                |                      |                 |    | 8                    | 12  | 8                    | 4   |
| 20       | Steel pourers:                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |     |
| 21       | 14 plants.....                    | 1910  | 47                   | 75.3                              | .308                            | 23.05                              |                                                |                      |                 |    | 5                    | 23  | 8                    | 11  |
| 22       |                                   | 1911  | 44                   | 73.7                              | .304                            | 22.32                              |                                                |                      |                 |    | 10                   | 12  | 18                   | 4   |
| 23       |                                   | 1912  | 46                   | 75.3                              | .313                            | 23.52                              |                                                |                      |                 |    | 10                   | 14  | 14                   | 8   |
| 24       | 15 plants.....                    | 1912  | 50                   | 76.5                              | .321                            | 24.57                              |                                                |                      |                 |    | 10                   | 12  | 14                   | 14  |
| 25       |                                   | 1913  | 52                   | 77.6                              | .352                            | 27.26                              |                                                |                      |                 |    | 2                    | 10  | 24                   | 16  |
| 26       | 16 plants.....                    | 1913  | 56                   | 77.0                              | .370                            | 28.46                              |                                                |                      |                 |    | 2                    | 14  | 26                   | 14  |
| 27       |                                   | 1914  | 56                   | 75.9                              | .339                            | 25.72                              |                                                |                      |                 |    | 8                    | 22  | 12                   | 14  |
| 28       | 21 plants.....                    | 1914  | 70                   | 76.4                              | .339                            | 25.94                              |                                                |                      |                 |    | 8                    | 26  | 20                   | 16  |
| 29       |                                   | 1915  | 70                   | 75.7                              | .356                            | 26.99                              |                                                |                      |                 |    | 8                    | 30  | 20                   | 12  |
| 30       | Mold cappers:                     |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |     |
| 31       | 8 plants.....                     | 1910  | 40                   | 76.5                              | .217                            | 16.49                              |                                                |                      |                 |    |                      | 22  | 6                    | 12  |
| 32       |                                   | 1911  | 38                   | 74.0                              | .215                            | 15.78                              |                                                |                      |                 |    | 8                    | 10  | 16                   | 4   |
| 33       |                                   | 1912  | 42                   | 75.9                              | .223                            | 16.86                              |                                                |                      |                 |    | 8                    | 12  | 14                   | 8   |
| 34       | 9 plants.....                     | 1912  | 52                   | 79.3                              | .228                            | 18.00                              |                                                |                      |                 |    | 8                    | 4   | 14                   | 26  |
| 35       |                                   | 1913  | 56                   | 79.2                              | .257                            | 20.34                              |                                                |                      |                 |    |                      | 6   | 28                   | 22  |
| 36       | 12 plants.....                    | 1913  | 68                   | 78.6                              | .255                            | 20.04                              |                                                |                      |                 |    | 4                    | 8   | 28                   | 28  |
| 37       |                                   | 1914  | 62                   | 77.3                              | .231                            | 17.78                              |                                                |                      |                 |    | 8                    | 18  | 14                   | 22  |
| 38       | 13 plants.....                    | 1914  | 70                   | 77.7                              | .232                            | 17.96                              |                                                |                      |                 |    | 8                    | 18  | 22                   | 22  |
| 39       |                                   | 1915  | 72                   | 76.1                              | .254                            | 19.24                              |                                                |                      |                 |    | 8                    | 30  | 20                   | 14  |
| 40       | Ladle cranimen:                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |     |
| 41       | 16 plants.....                    | 1910  | 90                   | 77.2                              | .294                            | 22.76                              |                                                |                      |                 |    | 8                    | 25  | 28                   | 29  |
| 42       |                                   | 1911  | 86                   | 74.6                              | .287                            | 21.32                              |                                                |                      |                 |    | 21                   | 29  | 20                   | 16  |
| 43       |                                   | 1912  | 90                   | 76.2                              | .317                            | 24.22                              |                                                |                      |                 |    | 9                    | 29  | 28                   | 24  |
| 44       | 17 plants.....                    | 1912  | 88                   | 76.0                              | .317                            | 24.14                              |                                                |                      |                 |    | 9                    | 29  | 28                   | 22  |
| 45       |                                   | 1913  | 90                   | 77.2                              | .341                            | 26.34                              |                                                |                      |                 |    | 8                    | 16  | 40                   | 26  |
| 46       |                                   | 1914  | 89                   | 76.2                              | .307                            | 23.39                              |                                                |                      |                 |    | 6                    | 21  | 40                   | 22  |
| 47       | 22 plants.....                    | 1914  | 104                  | 76.5                              | .305                            | 23.34                              |                                                |                      |                 |    | 6                    | 25  | 49                   | 24  |
| 48       |                                   | 1915  | 107                  | 76.0                              | .327                            | 24.92                              |                                                |                      |                 |    | 6                    | 31  | 50                   | 20  |
| 49       | Ingot strippers:                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |     |
| 50       | 15 plants.....                    | 1910  | 46                   | 73.7                              | .275                            | 19.88                              | 3                                              |                      |                 |    | 10                   | 14  | 8                    | 11  |
| 51       |                                   | 1911  | 51                   | 71.9                              | .253                            | 18.06                              |                                                | 3                    |                 |    | 4                    | 32  | 10                   | 2   |
| 52       |                                   | 1912  | 49                   | 72.4                              | .281                            | 20.00                              |                                                | 3                    |                 |    |                      | 34  | 10                   | 2   |
| 53       | 15 plants.....                    | 1912  | 55                   | 72.9                              | .278                            | 19.99                              |                                                | 3                    |                 |    |                      | 38  | 10                   | 4   |
| 54       |                                   | 1913  | 61                   | 74.5                              | .296                            | 21.85                              |                                                | 3                    |                 |    |                      | 28  | 18                   | 12  |

AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
HEARTH FURNACES—Continued.

| Employees whose rates of wages per hour were— |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | Line<br>No, |
|-----------------------------------------------|-----------------------------|------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|----------------------------|-------------|
| 7<br>and<br>under<br>8 cts.                   | 8<br>and<br>under<br>9 cts. | 9<br>and<br>under<br>10 cts. | 10<br>and<br>under<br>12 cts. | 12<br>and<br>under<br>14 cts. | 14<br>and<br>under<br>16 cts. | 16<br>and<br>under<br>18 cts. | 18<br>and<br>under<br>20 cts. | 20<br>and<br>under<br>25 cts. | 25<br>and<br>under<br>30 cts. | 30<br>and<br>under<br>40 cts. | 40<br>and<br>under<br>50 cts. | 50<br>and<br>under<br>60 cts. | 60<br>and<br>under<br>70 cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                             |                              |                               |                               |                               | 14                            | 151                           | 66                            | 162                           |                               |                               |                               |                               |                            | 1           |
|                                               |                             |                              |                               |                               | 24                            | 59                            | 85                            | 94                            | 131                           | 1                             |                               |                               |                               |                            | 2           |
|                                               |                             |                              |                               |                               | 20                            | 53                            | 56                            | 63                            | 186                           | 36                            |                               |                               |                               |                            | 3           |
|                                               |                             |                              |                               |                               | 20                            | 53                            | 52                            | 43                            | 186                           | 36                            |                               |                               |                               |                            | 4           |
|                                               |                             |                              |                               |                               |                               | 20                            | 31                            | 58                            | 221                           | 74                            | 12                            |                               |                               |                            | 5           |
|                                               |                             |                              |                               |                               |                               | 20                            | 67                            | 58                            | 227                           | 74                            | 12                            |                               |                               |                            | 6           |
|                                               |                             |                              |                               |                               |                               | 12                            | 62                            | 42                            | 240                           | 36                            |                               |                               |                               |                            | 7           |
|                                               |                             |                              |                               |                               |                               | 12                            | 78                            | 60                            | 256                           | 36                            |                               |                               |                               |                            | 8           |
|                                               |                             |                              |                               |                               |                               | 13                            | 30                            | 90                            | 237                           | 84                            |                               |                               |                               |                            | 9           |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 14                            |                               | 10                            | 4                             | 2                             |                            | 10          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 9                             | 4                             | 11                            | 3                             | 2                             |                            | 11          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 5                             | 8                             | 8                             | 8                             |                               |                            | 12          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 2                             | 10                            | 8                             | 6                             |                               |                            | 13          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               | 8                             | 12                            | 4                             | 2                             |                            | 14          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 2                             | 12                            | 14                            | 2                             |                               |                            | 15          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 2                             | 18                            | 10                            |                               |                               |                            | 16          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 4                             | 18                            | 10                            |                               |                               |                            | 17          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 6                             | 12                            | 14                            |                               |                               |                            | 18          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 5                             | 19                            | 19                            | 4                             |                               |                            | 19          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 6                             | 14                            | 22                            | 2                             |                               |                            | 20          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 6                             | 12                            | 24                            | 4                             |                               |                            | 21          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 6                             | 8                             | 32                            | 4                             |                               |                            | 22          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 4                             | 6                             | 32                            | 10                            |                               |                            | 23          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 4                             | 4                             | 32                            | 12                            | 4                             |                            | 24          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               | 18                            | 32                            | 2                             | 4                             |                            | 25          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 4                             | 18                            | 38                            | 6                             | 4                             |                            | 26          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               | 15                            | 37                            | 18                            |                               |                            | 27          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 28          |
|                                               |                             |                              |                               |                               | 8                             | 6                             |                               | 14                            | 6                             | 6                             |                               |                               |                               |                            | 29          |
|                                               |                             |                              |                               |                               | 12                            |                               | 2                             | 14                            | 4                             | 6                             |                               |                               |                               |                            | 30          |
|                                               |                             |                              |                               |                               | 6                             |                               | 2                             | 18                            | 12                            | 4                             |                               |                               |                               |                            | 31          |
|                                               |                             |                              |                               |                               |                               | 6                             | 2                             | 18                            | 16                            | 4                             |                               |                               |                               |                            | 32          |
|                                               |                             |                              |                               |                               |                               | 8                             | 8                             | 8                             | 16                            | 16                            |                               |                               |                               |                            | 33          |
|                                               |                             |                              |                               |                               |                               |                               | 2                             | 12                            | 22                            | 16                            |                               |                               |                               |                            | 34          |
|                                               |                             |                              |                               |                               |                               |                               | 2                             | 6                             | 34                            | 20                            |                               |                               |                               |                            | 35          |
|                                               |                             |                              |                               |                               |                               |                               | 2                             | 6                             | 42                            | 20                            |                               |                               |                               |                            | 36          |
|                                               |                             |                              |                               |                               |                               |                               | 2                             | 6                             | 20                            | 37                            |                               | 7                             |                               |                            | 37          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 20                            | 19                            | 39                            |                               | 6                             |                               |                            | 38          |
|                                               |                             |                              |                               |                               |                               |                               | 6                             | 14                            | 34                            | 24                            |                               | 7                             |                               |                            | 39          |
|                                               |                             |                              |                               |                               |                               |                               | 5                             | 6                             | 7                             | 77                            |                               |                               |                               |                            | 40          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 6                             | 7                             | 2                             |                               |                               |                               |                            | 41          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 6                             | 8                             | 6                             |                               | 4                             |                               |                            | 42          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 6                             | 6                             | 29                            |                               | 48                            |                               |                            | 43          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 6                             | 10                            | 32                            |                               |                               |                               |                            | 44          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 6                             | 3                             | 27                            |                               | 58                            | 13                            |                            | 45          |
|                                               |                             |                              |                               | 2                             |                               |                               | 2                             | 19                            | 10                            | 10                            |                               | 3                             |                               |                            | 46          |
|                                               |                             |                              |                               |                               |                               |                               | 4                             | 16                            | 7                             | 11                            |                               | 10                            | 2                             | 1                          | 47          |
|                                               |                             |                              |                               |                               |                               |                               | 4                             | 20                            | 6                             | 16                            |                               |                               | 3                             |                            | 48          |
|                                               |                             |                              |                               |                               |                               |                               | 2                             | 26                            | 8                             | 16                            |                               |                               | 3                             |                            | 49          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 2                             | 3                             | 34                            |                               | 6                             |                               |                            | 50          |

TABLE E.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1910 TO 1915—OPEN-

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |     |                      |     |                      |     |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-----|----------------------|-----|----------------------|-----|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60  | Over 60 and under 72 | 72  | Over 72 and under 84 | 84  |
| 1        | Ingot strippers—Con.              | 1913  | 41                   | 76.0                              | \$0.302                         | \$22.54                            |                                                | 3                    |                 |     |                      | 14  | 12                   | 12  |
| 2        | 14 plants.....                    | 1914  | 39                   | 74.9                              | .292                            | 21.41                              |                                                | 3                    |                 |     |                      | 14  | 16                   | 6   |
| 3        | 18 plants.....                    | 1914  | 47                   | 75.8                              | .292                            | 21.72                              |                                                | 3                    |                 |     |                      | 14  | 22                   | 8   |
| 4        |                                   | 1915  | 48                   | 76.3                              | .303                            | 22.76                              |                                                | 3                    |                 |     |                      | 14  | 20                   | 11  |
| 5        | Engineers, locomotive:            | 1910  | 107                  | 77.3                              | .244                            | 18.92                              |                                                |                      |                 |     | 6                    | 25  | 48                   | 28  |
| 6        | 14 plants.....                    | 1911  | 110                  | 74.4                              | .248                            | 18.40                              |                                                |                      |                 |     | 39                   | 22  | 40                   | 9   |
| 7        | 15 plants.....                    | 1911  | 114                  | 74.3                              | .247                            | 18.32                              |                                                |                      |                 |     | 43                   | 22  | 40                   | 9   |
| 8        |                                   | 1912  | 111                  | 75.2                              | .261                            | 19.61                              |                                                |                      |                 |     | 16                   | 22  | 64                   | 9   |
| 9        | 15 plants.....                    | 1912  | 117                  | 75.8                              | .262                            | 19.86                              |                                                |                      |                 |     | 16                   | 12  | 78                   | 11  |
| 10       |                                   | 1913  | 114                  | 76.8                              | .293                            | 22.50                              |                                                |                      |                 |     | 16                   | 17  | 58                   | 23  |
| 11       | 16 plants.....                    | 1913  | 119                  | 76.6                              | .295                            | 22.55                              |                                                |                      |                 |     | 14                   | 23  | 62                   | 20  |
| 12       |                                   | 1914  | 119                  | 76.3                              | .284                            | 21.67                              |                                                |                      |                 |     | 14                   | 24  | 54                   | 27  |
| 13       | 21 plants.....                    | 1914  | 137                  | 76.5                              | .281                            | 21.51                              |                                                |                      |                 |     | 14                   | 28  | 66                   | 29  |
| 14       | Switchmen:                        | 1915  | 138                  | 77.1                              | .279                            | 21.57                              |                                                |                      |                 |     | 8                    | 29  | 68                   | 33  |
| 15       | 14 plants.....                    | 1910  | 109                  | 77.3                              | .185                            | 14.29                              |                                                |                      |                 |     | 7                    | 24  | 48                   | 30  |
| 16       |                                   | 1911  | 113                  | 74.5                              | .187                            | 13.90                              |                                                |                      |                 |     | 41                   | 22  | 40                   | 10  |
| 17       | 15 plants.....                    | 1911  | 117                  | 74.4                              | .186                            | 13.85                              |                                                |                      |                 |     | 45                   | 22  | 40                   | 10  |
| 18       |                                   | 1912  | 112                  | 74.6                              | .198                            | 14.75                              |                                                |                      |                 |     | 18                   | 32  | 52                   | 10  |
| 19       | 15 plants.....                    | 1912  | 118                  | 75.2                              | .199                            | 14.92                              |                                                |                      |                 |     | 18                   | 22  | 66                   | 12  |
| 20       |                                   | 1913  | 117                  | 76.8                              | .230                            | 17.63                              |                                                |                      |                 |     | 18                   | 17  | 58                   | 24  |
| 21       | 16 plants.....                    | 1913  | 127                  | 76.3                              | .230                            | 17.55                              |                                                |                      |                 |     | 16                   | 29  | 62                   | 20  |
| 22       |                                   | 1914  | 131                  | 76.3                              | .227                            | 17.32                              |                                                |                      |                 |     | 16                   | 30  | 54                   | 31  |
| 23       | 21 plants.....                    | 1914  | 149                  | 76.5                              | .226                            | 17.29                              |                                                |                      |                 |     | 16                   | 34  | 66                   | 33  |
| 24       |                                   | 1915  | 150                  | 77.0                              | .225                            | 17.33                              |                                                |                      |                 |     | 8                    | 37  | 68                   | 37  |
| 25       | Laborers:                         | 1910  | 1,038                | 74.5                              | .157                            | 11.69                              |                                                | 29                   | 8               | 63  | 212                  | 137 | 365                  | 224 |
| 26       | 17 plants.....                    | 1911  | 806                  | 73.2                              | .161                            | 11.78                              |                                                | 35                   |                 | 55  | 192                  | 117 | 298                  | 109 |
| 27       |                                   | 1912  | 897                  | 74.4                              | .163                            | 12.10                              |                                                | 51                   | 5               | 52  | 115                  | 131 | 392                  | 151 |
| 28       | 17 plants.....                    | 1912  | 948                  | 74.7                              | .164                            | 12.21                              |                                                | 51                   | 4               | 50  | 125                  | 159 | 365                  | 194 |
| 29       |                                   | 1913  | 1,109                | 76.2                              | .187                            | 14.24                              |                                                | 35                   | 13              | 43  | 61                   | 281 | 343                  | 333 |
| 30       | 17 plants.....                    | 1913  | 800                  | 76.2                              | .185                            | 14.05                              |                                                | 35                   | 10              | 38  | 55                   | 154 | 234                  | 274 |
| 31       |                                   | 1914  | 672                  | 70.8                              | .186                            | 13.15                              |                                                | 15                   | 69              | 105 | 111                  | 35  | 271                  | 66  |
| 32       | 22 plants.....                    | 1914  | 805                  | 69.5                              | .185                            | 12.84                              | 1                                              | 15                   | 72              | 219 | 112                  | 35  | 276                  | 75  |
| 33       |                                   | 1915  | 723                  | 70.8                              | .186                            | 13.19                              |                                                | 11                   | 45              | 155 | 159                  | 41  | 217                  | 95  |
| 34       | Unclassified—productive:          | 1914  | 849                  | 75.3                              | .217                            | 16.29                              | 2                                              | 12                   | 15              | 8   | 89                   | 308 | 233                  | 182 |
| 35       | 22 plants.....                    | 1915  | 917                  | 75.4                              | .227                            | 17.11                              |                                                | 13                   | 12              | 3   | 106                  | 332 | 260                  | 191 |
| 36       | Unclassified—nonproductive:       | 1914  | 1,141                | 73.1                              | .227                            | 16.37                              | 5                                              | 36                   | 177             | 71  | 108                  | 226 | 121                  | 397 |
| 37       | 21 plants.....                    | 1915  | 1,148                | 71.5                              | .233                            | 16.39                              | 7                                              | 74                   | 134             | 120 | 140                  | 227 | 114                  | 332 |

<sup>1</sup> Including 1 employee whose full-time hours per week were 98.



AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
HEARTH FURNACES—Concluded.

| Employees whose rates of wages per hour were— |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | Line<br>No. |
|-----------------------------------------------|-----------------------------|------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|----------------------------|-------------|
| 7<br>and<br>under<br>8 cts.                   | 8<br>and<br>under<br>9 cts. | 9<br>and<br>under<br>10 cts. | 10<br>and<br>under<br>12 cts. | 12<br>and<br>under<br>14 cts. | 14<br>and<br>under<br>16 cts. | 16<br>and<br>under<br>18 cts. | 18<br>and<br>under<br>20 cts. | 20<br>and<br>under<br>25 cts. | 25<br>and<br>under<br>30 cts. | 30<br>and<br>under<br>40 cts. | 40<br>and<br>under<br>50 cts. | 50<br>and<br>under<br>60 cts. | 60<br>and<br>under<br>70 cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                             |                              |                               |                               |                               |                               |                               | 6                             | 2                             | 13                            | 15                            | 5                             |                               |                            | 1           |
|                                               |                             |                              |                               |                               |                               |                               |                               | 6                             | 4                             | 15                            | 11                            | 3                             |                               |                            | 2           |
|                                               |                             |                              |                               |                               |                               |                               | 2                             | 6                             | 6                             | 15                            | 17                            | 3                             |                               |                            | 3           |
|                                               |                             |                              |                               |                               |                               |                               |                               | 10                            | 11                            | 20                            | 5                             |                               |                               |                            | 4           |
|                                               |                             |                              |                               |                               |                               | 8                             | 2                             | 52                            | 39                            | 6                             |                               |                               |                               |                            | 5           |
|                                               |                             |                              |                               |                               |                               | 4                             | 2                             | 45                            | 57                            | 2                             |                               |                               |                               |                            | 6           |
|                                               |                             |                              |                               |                               |                               | 4                             | 4                             | 45                            | 59                            | 2                             |                               |                               |                               |                            | 7           |
|                                               |                             |                              |                               |                               |                               | 4                             | 4                             | 26                            | 57                            | 20                            |                               |                               |                               |                            | 8           |
|                                               |                             |                              |                               |                               |                               | 4                             | 4                             | 26                            | 63                            | 20                            |                               |                               |                               |                            | 9           |
|                                               |                             |                              |                               |                               |                               | 2                             | 2                             | 14                            | 41                            | 55                            |                               |                               |                               |                            | 10          |
|                                               |                             |                              |                               |                               |                               |                               | 2                             | 14                            | 48                            | 55                            |                               |                               |                               |                            | 11          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 14                            | 59                            | 46                            |                               |                               |                               |                            | 12          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 21                            | 66                            | 50                            |                               |                               |                               |                            | 13          |
|                                               |                             |                              |                               |                               |                               |                               | 4                             | 20                            | 75                            | 39                            |                               |                               |                               |                            | 14          |
|                                               |                             |                              |                               |                               | 12                            | 35                            | 34                            | 28                            |                               |                               |                               |                               |                               |                            | 15          |
|                                               |                             |                              |                               |                               | 6                             | 29                            | 52                            | 26                            |                               |                               |                               |                               |                               |                            | 16          |
|                                               |                             |                              |                               |                               | 8                             | 29                            | 52                            | 28                            |                               |                               |                               |                               |                               |                            | 17          |
|                                               |                             |                              |                               |                               | 6                             | 20                            | 46                            | 32                            | 8                             |                               |                               |                               |                               |                            | 18          |
|                                               |                             |                              |                               |                               | 6                             | 18                            | 52                            | 34                            | 8                             |                               |                               |                               |                               |                            | 19          |
|                                               |                             |                              |                               |                               | 2                             | 8                             | 4                             | 66                            | 37                            |                               |                               |                               |                               |                            | 20          |
|                                               |                             |                              |                               |                               |                               | 6                             | 12                            | 66                            | 43                            |                               |                               |                               |                               |                            | 21          |
|                                               |                             |                              |                               |                               |                               | 6                             | 10                            | 73                            | 42                            |                               |                               |                               |                               |                            | 22          |
|                                               |                             |                              |                               |                               |                               | 8                             | 16                            | 79                            | 46                            |                               |                               |                               |                               |                            | 23          |
|                                               |                             |                              |                               |                               | 2                             | 8                             | 10                            | 97                            | 29                            | 4                             |                               |                               |                               |                            | 24          |
|                                               |                             |                              |                               | 204                           | 259                           | 575                           |                               |                               |                               |                               |                               |                               |                               |                            | 25          |
|                                               |                             |                              |                               | 140                           | 135                           | 512                           | 19                            |                               |                               |                               |                               |                               |                               |                            | 26          |
|                                               |                             |                              |                               | 118                           | 80                            | 676                           | 23                            |                               |                               |                               |                               |                               |                               |                            | 27          |
|                                               |                             |                              |                               | 120                           | 85                            | 666                           | 77                            |                               |                               |                               |                               |                               |                               |                            | 28          |
|                                               |                             |                              |                               | 11                            | 55                            | 323                           | 214                           | 506                           |                               |                               |                               |                               |                               |                            | 29          |
|                                               |                             |                              |                               | 7                             | 53                            | 258                           | 189                           | 293                           |                               |                               |                               |                               |                               |                            | 30          |
|                                               |                             |                              |                               | 5                             | 25                            | 239                           | 167                           | 236                           |                               |                               |                               |                               |                               |                            | 31          |
|                                               |                             |                              |                               | 5                             | 25                            | 331                           | 176                           | 268                           |                               |                               |                               |                               |                               |                            | 32          |
|                                               |                             |                              |                               | 4                             | 28                            | 217                           | 177                           | 297                           |                               |                               |                               |                               |                               |                            | 33          |
|                                               |                             |                              |                               | 5                             | 20                            | 88                            | 142                           | 440                           | 117                           | 34                            | 1                             |                               |                               |                            | 34          |
|                                               |                             |                              |                               | 2                             | 28                            | 79                            | 123                           | 388                           | 224                           | 70                            | 3                             | 2                             |                               |                            | 35          |
|                                               |                             |                              |                               | 1                             | 26                            | 216                           | 144                           | 438                           | 167                           | 97                            | 44                            | 6                             | 2                             |                            | 36          |
|                                               |                             |                              |                               | 5                             | 44                            | 123                           | 211                           | 433                           | 174                           | 96                            | 49                            | 6                             | 7                             |                            | 37          |

\* Including 1 employee whose full-time hours per week were 91.

TABLE F.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER BY YEARS, 1913 TO 1915—

[The abbreviation "G. L. and M. W." in this table stands for Great Lakes

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |     |                      |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|-----|----------------------|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72  | Over 72 and under 84 |
|          | <b>Stockers:</b>                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 1        | Eastern—                          |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 2        | 4 plants.....                     | 1913  | 98                   | 73.8                              | \$0.171                         | \$12.61                            |                                                |                      |                 |    | 32                   | 46  | 20                   |
|          |                                   | 1914  | 73                   | 73.4                              | .170                            | 12.44                              |                                                |                      |                 | 1  | 32                   | 20  | 10                   |
| 3        | 6 plants.....                     | 1914  | 93                   | 73.8                              | .174                            | 12.87                              |                                                |                      |                 | 1  | 32                   | 30  | 10                   |
| 4        |                                   | 1915  | 98                   | 74.6                              | .184                            | 13.71                              |                                                |                      |                 | 1  | 30                   | 29  | 16                   |
| 5        | <b>Pittsburgh—</b>                |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 6        | 5 plants.....                     | 1913  | 167                  | 78.8                              | .212                            | 16.65                              |                                                |                      |                 |    |                      | 133 | 34                   |
|          |                                   | 1914  | 161                  | 77.2                              | .224                            | 17.13                              |                                                |                      |                 |    |                      | 14  | 137                  |
| 7        | 6 plants.....                     | 1914  | 175                  | 77.6                              | .225                            | 17.31                              |                                                |                      |                 |    |                      | 14  | 137                  |
| 8        |                                   | 1915  | 125                  | 78.4                              | .218                            | 17.20                              |                                                |                      |                 |    |                      | 14  | 39                   |
| 9        | <b>G. L. and M. W.—</b>           |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 10       | 6 plants.....                     | 1913  | 124                  | 79.7                              | .202                            | 16.10                              |                                                |                      |                 |    |                      | 32  | 68                   |
|          |                                   | 1914  | 103                  | 78.6                              | .206                            | 16.18                              |                                                |                      |                 |    |                      | 29  | 40                   |
| 11       | 7 plants.....                     | 1914  | 115                  | 78.6                              | .204                            | 15.96                              |                                                |                      |                 |    |                      | 29  | 40                   |
| 12       |                                   | 1915  | 120                  | 77.3                              | .199                            | 15.34                              |                                                |                      |                 | 6  |                      | 32  | 36                   |
| 13       | <b>Southern—</b>                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 14       | 2 plants.....                     | 1913  | 22                   | 74.7                              | .185                            | 13.89                              |                                                |                      |                 |    |                      | 12  | 10                   |
|          |                                   | 1914  | 18                   | 74.7                              | .168                            | 12.56                              |                                                |                      |                 |    |                      | 12  | 6                    |
| 15       | 3 plants.....                     | 1914  | 26                   | 77.5                              | .170                            | 13.22                              |                                                |                      |                 |    |                      | 12  | 8                    |
| 16       |                                   | 1915  | 23                   | 82.4                              | .161                            | 13.29                              |                                                |                      |                 |    |                      | 3   | 20                   |
| 17       | <b>Total—</b>                     |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 18       | 17 plants.....                    | 1913  | 411                  | 77.7                              | .198                            | 15.37                              |                                                |                      |                 |    | 32                   | 90  | 167                  |
|          |                                   | 1914  | 355                  | 76.7                              | .205                            | 15.66                              |                                                |                      |                 | 1  | 32                   | 75  | 187                  |
| 19       | 22 plants.....                    | 1914  | 409                  | 77.0                              | .204                            | 15.66                              |                                                |                      |                 | 1  | 32                   | 85  | 196                  |
| 20       |                                   | 1915  | 366                  | 77.3                              | .199                            | 15.41                              |                                                |                      |                 | 7  | 30                   | 78  | 140                  |
|          | <b>Stock cranimen:</b>            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 21       | Eastern—                          |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 22       | 4 plants.....                     | 1913  | 12                   | 75.0                              | .205                            | 15.30                              |                                                |                      |                 |    | 4                    | 4   | 4                    |
|          |                                   | 1914  | 12                   | 76.3                              | .213                            | 16.15                              |                                                |                      |                 |    | 4                    | 2   | 4                    |
| 23       | 6 plants.....                     | 1914  | 18                   | 76.2                              | .205                            | 15.51                              |                                                |                      |                 |    | 4                    | 4   | 4                    |
| 24       |                                   | 1915  | 20                   | 75.8                              | .216                            | 16.24                              |                                                |                      |                 |    | 4                    | 6   | 4                    |
| 25       | <b>Pittsburgh—</b>                |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 26       | 5 plants.....                     | 1913  | 38                   | 79.2                              | .241                            | 19.06                              |                                                |                      |                 |    |                      |     | 26                   |
|          |                                   | 1914  | 36                   | 77.3                              | .233                            | 17.92                              |                                                |                      |                 |    |                      | 4   | 20                   |
| 27       | 6 plants.....                     | 1914  | 42                   | 77.8                              | .236                            | 18.32                              |                                                |                      |                 |    |                      | 4   | 26                   |
| 28       |                                   | 1915  | 36                   | 78.5                              | .256                            | 20.26                              |                                                |                      |                 |    |                      | 4   | 20                   |
| 29       | <b>G. L. and M. W.—</b>           |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 30       | 5 plants.....                     | 1913  | 30                   | 80.8                              | .246                            | 19.90                              |                                                |                      |                 |    |                      | 4   | 8                    |
|          |                                   | 1914  | 30                   | 80.4                              | .258                            | 20.76                              |                                                |                      |                 |    |                      | 4   | 10                   |
| 31       | 6 plants.....                     | 1914  | 34                   | 80.1                              | .257                            | 20.60                              |                                                |                      |                 |    |                      | 4   | 14                   |
| 32       |                                   | 1915  | 34                   | 76.9                              | .278                            | 21.64                              |                                                |                      |                 |    |                      | 12  | 16                   |
| 33       | <b>Southern—</b>                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 34       | 1 plant.....                      | 1913  | 4                    | 78.0                              | .252                            | 19.66                              |                                                |                      |                 |    |                      |     | 4                    |
|          |                                   | 1914  | 2                    | 78.0                              | .223                            | 17.36                              |                                                |                      |                 |    |                      |     | 2                    |
| 35       | 2 plants.....                     | 1914  | 4                    | 81.0                              | .221                            | 17.85                              |                                                |                      |                 |    |                      |     | 2                    |
| 36       |                                   | 1915  | 4                    | 81.0                              | .214                            | 17.25                              |                                                |                      |                 |    |                      |     | 2                    |
| 37       | <b>Total—</b>                     |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 38       | 15 plants.....                    | 1913  | 84                   | 79.1                              | .238                            | 18.85                              |                                                |                      |                 |    | 4                    | 8   | 38                   |
|          |                                   | 1914  | 80                   | 78.3                              | .239                            | 18.70                              |                                                |                      |                 |    | 4                    | 10  | 34                   |
| 39       | 20 plants.....                    | 1914  | 98                   | 78.4                              | .237                            | 18.58                              |                                                |                      |                 |    | 4                    | 12  | 48                   |
| 40       |                                   | 1915  | 94                   | 77.4                              | .253                            | 19.77                              |                                                |                      |                 |    | 4                    | 22  | 44                   |

<sup>1</sup> Including 1 employee whose full-time hours per week were 89.

**HOURLY, AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT,  
OPEN-HEARTH FURNACES.**

and Middle West. The figures for each group of years are for identical plants.]

| Employees whose rates of wages per hour were— |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | Line<br>No. |
|-----------------------------------------------|-----------------------------|------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|----------------------------|-------------|
| 7<br>and<br>under<br>8 cts.                   | 8<br>and<br>under<br>9 cts. | 9<br>and<br>under<br>10 cts. | 10<br>and<br>under<br>12 cts. | 12<br>and<br>under<br>14 cts. | 14<br>and<br>under<br>16 cts. | 16<br>and<br>under<br>18 cts. | 18<br>and<br>under<br>20 cts. | 20<br>and<br>under<br>25 cts. | 25<br>and<br>under<br>30 cts. | 30<br>and<br>under<br>40 cts. | 40<br>and<br>under<br>50 cts. | 50<br>and<br>under<br>60 cts. | 60<br>and<br>under<br>70 cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                             |                              |                               |                               |                               | 68                            | 30                            |                               |                               |                               |                               |                               |                               |                            | 1           |
|                                               |                             |                              |                               |                               | 1                             | 68                            | 4                             |                               |                               |                               |                               |                               |                               |                            | 2           |
|                                               |                             |                              |                               |                               | 1                             | 68                            | 14                            | 10                            |                               |                               |                               |                               |                               |                            | 3           |
|                                               |                             |                              |                               |                               | 1                             | 58                            | 26                            | 13                            |                               |                               |                               |                               |                               |                            | 4           |
|                                               |                             |                              |                               |                               |                               | 14                            | 81                            | 40                            | 32                            |                               |                               |                               |                               |                            | 5           |
|                                               |                             |                              |                               |                               |                               | 14                            | 70                            | 33                            | 24                            | 20                            |                               |                               |                               |                            | 6           |
|                                               |                             |                              |                               |                               |                               | 14                            | 70                            | 47                            | 24                            | 20                            |                               |                               |                               |                            | 7           |
|                                               |                             |                              |                               |                               |                               | 14                            | 20                            | 79                            | 12                            |                               |                               |                               |                               |                            | 8           |
|                                               |                             |                              |                               |                               |                               | 28                            | 12                            | 84                            |                               |                               |                               |                               |                               |                            | 9           |
|                                               |                             |                              |                               |                               |                               | 24                            | 8                             | 51                            | 20                            |                               |                               |                               |                               |                            | 10          |
|                                               |                             |                              |                               |                               |                               | 24                            | 20                            | 51                            | 20                            |                               |                               |                               |                               |                            | 11          |
|                                               |                             |                              |                               |                               |                               |                               | 55                            | 65                            |                               |                               |                               |                               |                               |                            | 12          |
|                                               |                             |                              |                               |                               |                               | 12                            |                               | 10                            |                               |                               |                               |                               |                               |                            | 13          |
|                                               |                             |                              |                               |                               |                               | 18                            |                               |                               |                               |                               |                               |                               |                               |                            | 14          |
|                                               |                             |                              |                               |                               |                               | 26                            |                               |                               |                               |                               |                               |                               |                               |                            | 15          |
|                                               |                             |                              |                               |                               | 1                             | 22                            |                               |                               |                               |                               |                               |                               |                               |                            | 16          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            |             |
|                                               |                             |                              |                               |                               | 1                             | 122                           | 123                           | 134                           | 32                            |                               |                               |                               |                               |                            | 17          |
|                                               |                             |                              |                               |                               |                               | 124                           | 82                            | 84                            | 44                            | 20                            |                               |                               |                               |                            | 18          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 108                           | 44                            |                               |                               |                               |                               |                            | 19          |
|                                               |                             |                              |                               |                               | 1                             | 132                           | 104                           | 108                           | 44                            | 20                            |                               |                               |                               |                            | 20          |
|                                               |                             |                              |                               |                               | 2                             | 94                            | 101                           | 157                           | 12                            |                               |                               |                               |                               |                            |             |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            |             |
|                                               |                             |                              |                               |                               |                               |                               | 6                             | 6                             |                               |                               |                               |                               |                               |                            | 21          |
|                                               |                             |                              |                               |                               |                               |                               | 1                             | 11                            |                               |                               |                               |                               |                               |                            | 22          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            |             |
|                                               |                             |                              |                               |                               |                               |                               | 5                             | 13                            |                               |                               |                               |                               |                               |                            | 23          |
|                                               |                             |                              |                               |                               |                               |                               | 5                             | 15                            |                               |                               |                               |                               |                               |                            | 24          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            |             |
|                                               |                             |                              |                               |                               |                               |                               |                               | 29                            | 7                             | 2                             |                               |                               |                               |                            | 25          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 30                            | 6                             |                               |                               |                               |                               |                            | 26          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            |             |
|                                               |                             |                              |                               |                               |                               |                               |                               | 30                            | 12                            |                               |                               |                               |                               |                            | 27          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 16                            | 18                            | 2                             |                               |                               |                               |                            | 28          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            |             |
|                                               |                             |                              |                               |                               |                               |                               |                               | 22                            | 8                             |                               |                               |                               |                               |                            | 29          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 15                            | 15                            |                               |                               |                               |                               |                            | 30          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            |             |
|                                               |                             |                              |                               |                               |                               |                               |                               | 19                            | 15                            |                               |                               |                               |                               |                            | 31          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 12                            | 16                            | 1                             | 5                             |                               |                               |                            | 32          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            |             |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 4                             |                               |                               |                               |                               |                            | 33          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 2                             |                               |                               |                               |                               |                               |                            | 34          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            |             |
|                                               |                             |                              |                               |                               |                               |                               |                               | 4                             |                               |                               |                               |                               |                               |                            | 35          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 4                             |                               |                               |                               |                               |                               |                            | 36          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            |             |
|                                               |                             |                              |                               |                               |                               |                               | 6                             | 57                            | 19                            | 2                             |                               |                               |                               |                            | 37          |
|                                               |                             |                              |                               |                               |                               |                               | 1                             | 58                            | 21                            |                               |                               |                               |                               |                            | 38          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            |             |
|                                               |                             |                              |                               |                               |                               |                               | 5                             | 66                            | 27                            |                               |                               |                               |                               |                            | 39          |
|                                               |                             |                              |                               |                               |                               |                               | 5                             | 47                            | 34                            | 3                             | 5                             |                               |                               |                            | 40          |

TABLE F.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER BY YEARS, 1913 TO 1915—OPEN-

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
|          | Charging-machine operators:       |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
|          | Eastern—                          |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 1        | 4 plants.....                     | 1913  | 14                   | 73.8                              | \$0.267                         | \$19.52                            |                                                |                      |                 |    | 10                   |    |                      | 4  |
| 2        |                                   | 1914  | 14                   | 75.9                              | .242                            | 18.28                              |                                                |                      |                 |    | 4                    | 4  | 2                    | 4  |
| 3        | 6 plants.....                     | 1914  | 18                   | 76.3                              | .249                            | 18.96                              |                                                |                      |                 |    | 4                    | 4  | 6                    | 4  |
| 4        |                                   | 1915  | 18                   | 76.3                              | .259                            | 19.63                              |                                                |                      |                 |    | 4                    | 4  | 6                    | 4  |
|          | Pittsburgh—                       |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 5        | 5 plants.....                     | 1913  | 30                   | 79.6                              | .321                            | 25.40                              |                                                |                      |                 |    |                      |    | 18                   | 12 |
| 6        |                                   | 1914  | 30                   | 77.6                              | .293                            | 22.57                              |                                                |                      |                 |    |                      | 10 | 8                    | 12 |
| 7        | 6 plants.....                     | 1914  | 34                   | 78.0                              | .297                            | 23.03                              |                                                |                      |                 |    |                      | 10 | 12                   | 12 |
| 8        |                                   | 1915  | 34                   | 78.0                              | .316                            | 24.59                              |                                                |                      |                 |    |                      | 10 | 12                   | 12 |
|          | G. L. and M. W.—                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 9        | 6 plants.....                     | 1913  | 26                   | 79.4                              | .384                            | 30.54                              |                                                |                      |                 |    |                      | 8  | 4                    | 14 |
| 10       |                                   | 1914  | 24                   | 75.5                              | .360                            | 27.17                              |                                                |                      |                 |    |                      | 14 | 6                    | 4  |
| 11       | 7 plants.....                     | 1914  | 26                   | 75.7                              | .357                            | 26.97                              |                                                |                      |                 |    |                      | 14 | 8                    | 4  |
| 12       |                                   | 1915  | 26                   | 76.6                              | .409                            | 31.42                              |                                                |                      |                 |    |                      | 12 | 8                    | 6  |
|          | Southern—                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 13       | 2 plants.....                     | 1913  | 6                    | 74.0                              | .351                            | 25.95                              |                                                |                      |                 |    |                      | 4  | 2                    |    |
| 14       |                                   | 1914  | 6                    | 82.0                              | .337                            | 27.64                              |                                                |                      |                 |    |                      |    | 2                    | 4  |
| 15       | 3 plants.....                     | 1914  | 8                    | 82.5                              | .318                            | 26.21                              |                                                |                      |                 |    |                      |    | 2                    | 6  |
| 16       |                                   | 1915  | 8                    | 82.5                              | .290                            | 23.87                              |                                                |                      |                 |    |                      |    | 2                    | 6  |
|          | Total—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 17       | 17 plants.....                    | 1913  | 76                   | 78.0                              | .335                            | 26.12                              |                                                |                      |                 |    | 10                   | 12 | 24                   | 30 |
| 18       |                                   | 1914  | 74                   | 77.0                              | .309                            | 23.66                              |                                                |                      |                 |    | 4                    | 28 | 18                   | 24 |
| 19       | 22 plants.....                    | 1914  | 86                   | 77.4                              | .307                            | 23.66                              |                                                |                      |                 |    | 4                    | 28 | 28                   | 26 |
| 20       |                                   | 1915  | 86                   | 77.7                              | .330                            | 25.55                              |                                                |                      |                 |    | 4                    | 26 | 28                   | 28 |
|          | Door operators:                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
|          | Eastern—                          |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 21       | 3 plants.....                     | 1913  | 26                   | 74.6                              | .104                            | 7.75                               |                                                |                      |                 |    | 8                    | 8  |                      | 10 |
| 22       |                                   | 1914  | 18                   | 77.9                              | .108                            | 8.36                               |                                                |                      |                 |    |                      | 8  | 2                    | 8  |
| 23       | 4 plants.....                     | 1914  | 22                   | 76.9                              | .113                            | 8.63                               |                                                |                      |                 |    |                      | 12 | 2                    | 8  |
| 24       |                                   | 1915  | 34                   | 77.5                              | .123                            | 9.46                               |                                                |                      |                 |    |                      | 14 | 8                    | 12 |
|          | Pittsburgh—                       |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 25       | 4 plants.....                     | 1913  | 60                   | 75.2                              | .103                            | 7.74                               |                                                |                      |                 |    | 24                   |    | 28                   | 8  |
| 26       |                                   | 1914  | 60                   | 74.0                              | .103                            | 7.61                               |                                                |                      |                 |    | 24                   | 8  | 20                   | 8  |
| 27       | 5 plants.....                     | 1914  | 68                   | 74.5                              | .103                            | 7.68                               |                                                |                      |                 |    | 24                   | 8  | 28                   | 8  |
| 28       |                                   | 1915  | 62                   | 73.5                              | .104                            | 7.64                               |                                                |                      |                 |    | 24                   | 8  | 28                   | 2  |
|          | G. L. and M. W.—                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 29       | 6 plants.....                     | 1913  | 64                   | 78.6                              | .123                            | 9.74                               |                                                |                      |                 |    |                      | 22 | 14                   | 28 |
| 30       |                                   | 1914  | 60                   | 78.2                              | .113                            | 8.80                               |                                                |                      |                 |    |                      | 20 | 18                   | 22 |
| 31       | 7 plants.....                     | 1914  | 64                   | 78.2                              | .114                            | 8.86                               |                                                |                      |                 |    |                      | 20 | 22                   | 22 |
| 32       |                                   | 1915  | 64                   | 77.4                              | .113                            | 8.75                               |                                                |                      |                 |    |                      | 22 | 26                   | 16 |
|          | Southern—                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 33       | 2 plants.....                     | 1913  | 10                   | 82.8                              | .119                            | 9.90                               |                                                |                      |                 |    |                      |    | 2                    | 8  |
| 34       |                                   | 1914  | 10                   | 82.8                              | .113                            | 9.36                               |                                                |                      |                 |    |                      |    | 2                    | 8  |
| 35       | 33 plants.....                    | 1914  | 16                   | 83.3                              | .105                            | 8.75                               |                                                |                      |                 |    |                      |    | 2                    | 14 |
| 36       |                                   | 1915  | 16                   | 82.5                              | .095                            | 8.07                               |                                                |                      |                 |    |                      |    | 4                    | 12 |
|          | Total—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 37       | 15 plants.....                    | 1913  | 160                  | 76.9                              | .112                            | 8.68                               |                                                |                      |                 |    | 32                   | 30 | 44                   | 54 |
| 38       |                                   | 1914  | 148                  | 76.8                              | .108                            | 8.30                               |                                                |                      |                 |    | 24                   | 36 | 42                   | 46 |
| 39       | 19 plants.....                    | 1914  | 170                  | 77.0                              | .109                            | 8.35                               |                                                |                      |                 |    | 24                   | 40 | 54                   | 52 |
| 40       |                                   | 1915  | 176                  | 76.5                              | .111                            | 8.43                               |                                                |                      |                 |    | 24                   | 44 | 66                   | 42 |

HOURLY AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT,  
HEARTH FURNACES—Continued.

| Employees whose rates of wages per hour were— |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | Line<br>No. |
|-----------------------------------------------|-----------------------------|------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|----------------------------|-------------|
| 7<br>and<br>under<br>8 cts.                   | 8<br>and<br>under<br>9 cts. | 9<br>and<br>under<br>10 cts. | 10<br>and<br>under<br>12 cts. | 12<br>and<br>under<br>14 cts. | 14<br>and<br>under<br>16 cts. | 16<br>and<br>under<br>18 cts. | 18<br>and<br>under<br>20 cts. | 20<br>and<br>under<br>25 cts. | 25<br>and<br>under<br>30 cts. | 30<br>and<br>under<br>40 cts. | 40<br>and<br>under<br>50 cts. | 50<br>and<br>under<br>60 cts. | 60<br>and<br>under<br>70 cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                             |                              |                               |                               |                               |                               |                               | 4<br>8                        | 6<br>6                        | 4                             |                               |                               |                               |                            | 1           |
|                                               |                             |                              |                               |                               |                               |                               |                               | 10<br>8                       | 6<br>8                        | 2<br>2                        |                               |                               |                               |                            | 2           |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 3           |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 4           |
|                                               |                             |                              |                               |                               |                               |                               |                               | 4                             | 12<br>20                      | 18<br>6                       |                               |                               |                               |                            | 5           |
|                                               |                             |                              |                               |                               |                               |                               |                               | 4<br>2                        | 20<br>10                      | 10<br>22                      |                               |                               |                               |                            | 6           |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 2<br>1                        | 14<br>21                      | 10<br>2                       |                               |                               |                            | 7           |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 1                             | 23<br>8                       | 2<br>18                       |                               |                               |                            | 8           |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 9           |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 10          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 11          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 12          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 13          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 14          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 15          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 2                             | 2                             | 6<br>6                        |                               |                               |                               |                            | 16          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 17          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 4<br>12                       | 20<br>27                      | 42<br>33                      | 10<br>2                       |                               |                               |                            | 18          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 14<br>12                      | 29<br>18                      | 41<br>38                      | 2<br>18                       |                               |                               |                            | 19          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 20          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 21          |
|                                               |                             |                              | 18<br>10                      |                               | 8<br>8                        |                               |                               |                               |                               |                               |                               |                               |                               |                            | 22          |
|                                               |                             |                              | 10<br>12                      |                               | 12<br>8                       |                               | 9<br>5                        |                               |                               |                               |                               |                               |                               |                            | 23          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 24          |
|                                               |                             |                              | 28<br>28                      | 32<br>32                      |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 25          |
|                                               |                             |                              | 28<br>22                      | 40<br>40                      |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 26          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 27          |
|                                               |                             |                              | 4                             | 16<br>14                      | 24<br>30                      | 20<br>6                       |                               |                               |                               |                               |                               |                               |                               |                            | 28          |
|                                               | 10                          |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 29          |
|                                               |                             |                              |                               | 14<br>16                      | 34<br>32                      | 6<br>6                        |                               |                               |                               |                               |                               |                               |                               |                            | 30          |
|                                               | 10<br>10                    |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 31          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 32          |
|                                               | 2                           |                              |                               |                               | 8                             |                               |                               |                               |                               |                               |                               |                               |                               |                            | 33          |
|                                               | 2                           |                              |                               |                               | 8                             |                               |                               |                               |                               |                               |                               |                               |                               |                            | 34          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 35          |
|                                               | 2<br>8                      | 6                            |                               | 8                             |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 36          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 37          |
|                                               | 2<br>12                     | 50<br>38                     | 48<br>46                      | 40<br>46                      | 20<br>6                       |                               |                               |                               |                               |                               |                               |                               |                               |                            | 38          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 39          |
|                                               | 12<br>18                    | 44<br>34                     | 54<br>72                      | 54<br>32                      | 6<br>15                       | 5                             |                               |                               |                               |                               |                               |                               |                               |                            | 40          |

TABLE F.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER BY YEARS, 1913 TO 1915—OPEN-

| Line No. | Occupation, and number of plants.                   | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                       |                  |    |                       |     |                       |     |
|----------|-----------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|-----------------------|------------------|----|-----------------------|-----|-----------------------|-----|
|          |                                                     |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56. | 56 and under 60. | 60 | Over 60 and under 72. | 72  | Over 72 and under 84. | 84  |
| 1        | Melters' helpers, first: Eastern—<br>4 plants.....  | 1913  | 60                   | 74.4                              | \$0.348                         | \$25.79                            |                                                |                       |                  |    | 10                    | 18  | 22                    | 10  |
|          |                                                     | 1914  | 50                   | 76.4                              | .325                            | 24.81                              |                                                |                       |                  |    |                       | 14  | 28                    | 8   |
| 3        | 6 plants.....                                       | 1914  | 70                   | 77.7                              | .337                            | 26.22                              |                                                |                       |                  |    |                       | 14  | 38                    | 18  |
|          |                                                     | 1915  | 76                   | 77.8                              | .354                            | 27.48                              |                                                |                       |                  |    |                       | 16  | 40                    | 20  |
| 5        | Pittsburgh—<br>5 plants.....                        | 1913  | 160                  | 76.2                              | .465                            | 35.38                              |                                                |                       |                  |    |                       |     | 148                   | 12  |
|          |                                                     | 1914  | 152                  | 76.4                              | .411                            | 31.37                              |                                                |                       |                  |    |                       |     | 152                   |     |
| 7        | 6 plants.....                                       | 1914  | 168                  | 77.0                              | .415                            | 31.95                              |                                                |                       |                  |    |                       |     | 168                   |     |
|          |                                                     | 1915  | 172                  | 77.0                              | .441                            | 33.93                              |                                                |                       |                  |    |                       |     | 172                   |     |
| 9        | G. L. and M. W.—<br>6 plants.....                   | 1913  | 122                  | 78.7                              | .442                            | 34.56                              |                                                |                       |                  |    |                       | 42  | 24                    | 56  |
|          |                                                     | 1914  | 132                  | 71.1                              | .469                            | 33.34                              |                                                |                       | 36               |    |                       | 42  | 32                    | 22  |
| 11       | 7 plants.....                                       | 1914  | 140                  | 71.4                              | .463                            | 33.01                              |                                                |                       | 36               |    |                       | 42  | 40                    | 22  |
|          |                                                     | 1915  | 148                  | 70.9                              | .478                            | 33.90                              |                                                |                       | 42               |    |                       | 40  | 46                    | 20  |
| 13       | Southern—<br>2 plants.....                          | 1913  | 22                   | 82.9                              | .499                            | 41.35                              |                                                |                       |                  |    |                       |     | 6                     | 16  |
|          |                                                     | 1914  | 20                   | 82.8                              | .470                            | 38.76                              |                                                |                       |                  |    |                       |     | 4                     | 16  |
| 15       | 3 plants.....                                       | 1914  | 26                   | 83.1                              | .438                            | 36.27                              |                                                |                       |                  |    |                       |     | 4                     | 22  |
|          |                                                     | 1915  | 26                   | 82.6                              | .420                            | 34.56                              |                                                |                       |                  |    |                       |     | 6                     | 20  |
| 17       | Total—<br>17 plants.....                            | 1913  | 364                  | 77.1                              | .440                            | 33.89                              |                                                |                       |                  |    | 10                    | 60  | 230                   | 94  |
|          |                                                     | 1914  | 354                  | 74.8                              | .424                            | 31.59                              |                                                |                       | 36               |    |                       | 56  | 216                   | 46  |
| 19       | 22 plants.....                                      | 1914  | 404                  | 75.6                              | .420                            | 31.60                              |                                                |                       | 36               |    |                       | 56  | 250                   | 62  |
|          |                                                     | 1915  | 422                  | 75.5                              | .437                            | 32.80                              |                                                |                       | 42               |    |                       | 56  | 264                   | 60  |
| 21       | Melters' helpers, second: Eastern—<br>4 plants..... | 1913  | 58                   | 72.8                              | .231                            | 16.82                              |                                                |                       |                  |    | 30                    | 18  |                       | 10  |
|          |                                                     | 1914  | 50                   | 74.4                              | .214                            | 15.97                              |                                                |                       |                  |    | 20                    | 14  | 8                     | 8   |
| 23       | 6 plants.....                                       | 1914  | 70                   | 74.9                              | .228                            | 17.09                              |                                                |                       |                  |    | 20                    | 14  | 28                    | 8   |
|          |                                                     | 1915  | 76                   | 75.1                              | .245                            | 18.39                              |                                                |                       |                  |    | 18                    | 16  | 32                    | 10  |
| 25       | Pittsburgh—<br>5 plants.....                        | 1913  | 160                  | 75.7                              | .317                            | 23.92                              |                                                |                       |                  |    | 40                    | 48  | 20                    | 52  |
|          |                                                     | 1914  | 152                  | 75.4                              | .284                            | 21.37                              |                                                |                       |                  |    | 40                    | 46  | 30                    | 36  |
| 27       | 6 plants.....                                       | 1914  | 168                  | 75.9                              | .286                            | 21.75                              |                                                |                       |                  |    | 40                    | 46  | 46                    | 36  |
|          |                                                     | 1915  | 172                  | 76.0                              | .310                            | 23.61                              |                                                |                       |                  |    | 40                    | 48  | 46                    | 38  |
| 29       | G. L. and M. W.—<br>6 plants.....                   | 1913  | 120                  | 78.8                              | .291                            | 22.76                              |                                                |                       |                  |    |                       | 40  | 24                    | 56  |
|          |                                                     | 1914  | 130                  | 76.1                              | .305                            | 21.54                              |                                                |                       | 36               |    |                       | 40  | 32                    | 22  |
| 31       | 7 plants.....                                       | 1914  | 138                  | 71.5                              | .300                            | 21.27                              |                                                |                       | 36               |    |                       | 40  | 40                    | 22  |
|          |                                                     | 1915  | 146                  | 70.9                              | .304                            | 21.22                              |                                                |                       | 42               |    |                       | 38  | 46                    | 20  |
| 33       | Southern—<br>2 plants.....                          | 1913  | 22                   | 82.4                              | .284                            | 23.39                              |                                                |                       |                  |    |                       |     | 6                     | 16  |
|          |                                                     | 1914  | 20                   | 82.8                              | .260                            | 21.51                              |                                                |                       |                  |    |                       |     | 4                     | 16  |
| 35       | 3 plants.....                                       | 1914  | 26                   | 83.1                              | .248                            | 20.58                              |                                                |                       |                  |    |                       |     | 4                     | 22  |
|          |                                                     | 1915  | 26                   | 82.6                              | .234                            | 19.35                              |                                                |                       |                  |    |                       |     | 6                     | 20  |
| 37       | Total—<br>17 plants.....                            | 1913  | 360                  | 76.7                              | .292                            | 22.36                              |                                                |                       |                  |    | 70                    | 106 | 50                    | 134 |
|          |                                                     | 1914  | 352                  | 74.1                              | .280                            | 20.67                              |                                                |                       | 36               |    | 60                    | 100 | 74                    | 82  |
| 39       | 22 plants.....                                      | 1914  | 402                  | 74.7                              | .278                            | 20.70                              |                                                |                       | 36               |    | 60                    | 100 | 118                   | 88  |
|          |                                                     | 1915  | 420                  | 74.5                              | .291                            | 21.57                              |                                                |                       | 42               |    | 58                    | 102 | 130                   | 88  |

HOURLY AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT,  
HEARTH FURNACES—Continued.

| Employees whose rates of wages per hour were— |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               | Line<br>No.                |          |
|-----------------------------------------------|-----------------------------|------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|----------------------------|----------|
| 7<br>and<br>under<br>8 cts.                   | 8<br>and<br>under<br>9 cts. | 9<br>and<br>under<br>10 cts. | 10<br>and<br>under<br>12 cts. | 12<br>and<br>under<br>14 cts. | 14<br>and<br>under<br>16 cts. | 16<br>and<br>under<br>18 cts. | 18<br>and<br>under<br>20 cts. | 20<br>and<br>under<br>25 cts. | 25<br>and<br>under<br>30 cts. | 30<br>and<br>under<br>40 cts. | 40<br>and<br>under<br>50 cts. | 50<br>and<br>under<br>60 cts. | 60<br>and<br>under<br>70 cts. | 70<br>cts.<br>and<br>over. |          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 3<br>15                       | 55<br>35                      | 2                             |                               |                               |                            | 1<br>2   |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 15<br>2                       | 50<br>65                      | 5<br>6                        | 3                             |                               |                            | 3<br>4   |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 6<br>2                        | 20<br>66                      | 80<br>76                      | 50<br>8                       | 4                             |                            | 5<br>6   |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 2                             | 68<br>43                      | 90<br>101                     | 8<br>26                       | 2                             |                            | 7<br>8   |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               | 24<br>21                      | 66<br>69                      | 32<br>36                      | 6                             |                            | 9<br>10  |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               | 29<br>14                      | 69<br>71                      | 36<br>61                      | 6                             | 2                          | 11<br>12 |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 2                             | 2<br>2                        | 6<br>10                       | 14<br>2                       | 4                             |                            | 13<br>14 |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 2                             | 8<br>12                       | 10<br>6                       | 2<br>8                        | 4                             |                            | 15<br>16 |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 9<br>19                       | 101<br>124                    | 154<br>155                    | 96<br>46                      | 4<br>10                       |                            | 17<br>18 |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 19<br>2                       | 155<br>134                    | 174<br>184                    | 46<br>98                      | 10<br>2                       | 2                          | 19<br>20 |
|                                               |                             |                              |                               |                               |                               |                               |                               | 2<br>10                       | 44<br>38                      | 12<br>2                       |                               |                               |                               |                            | 21<br>22 |
|                                               |                             |                              |                               |                               |                               |                               |                               | 10<br>2                       | 48<br>53                      | 10<br>11                      | 2<br>9                        | 1                             |                               |                            | 23<br>24 |
|                                               |                             |                              |                               |                               |                               |                               |                               | 2<br>2                        | 12<br>18                      | 30<br>86                      | 114<br>44                     | 2<br>2                        |                               |                            | 25<br>26 |
|                                               |                             |                              |                               |                               |                               |                               |                               | 2<br>10                       | 18<br>67                      | 90<br>91                      | 56<br>4                       | 2                             |                               |                            | 27<br>28 |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 20<br>26                      | 54<br>38                      | 46<br>63                      |                               | 3                             |                            | 29<br>30 |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 34<br>36                      | 38<br>22                      | 63<br>86                      | 3<br>2                        |                               |                            | 31<br>32 |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 2<br>6                        | 12<br>10                      | 8<br>2                        |                               |                               |                            | 33<br>34 |
|                                               |                             |                              |                               |                               |                               |                               |                               | 2                             | 12<br>21                      | 10<br>5                       | 2                             |                               |                               |                            | 35<br>36 |
|                                               |                             |                              |                               |                               |                               |                               |                               | 2                             | 4<br>12                       | 78<br>88                      | 108<br>136                    | 2<br>5                        |                               |                            | 37<br>38 |
|                                               |                             |                              |                               |                               |                               |                               |                               | 2                             | 12<br>2                       | 112<br>120                    | 148<br>105                    | 123<br>186                    | 5<br>7                        |                            | 39<br>40 |

TABLE F.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER BY YEARS, 1913 TO 1915—OPEN-

| Line No. | Occupation, and number of plants.        | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |     |                      |     |
|----------|------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|-----|----------------------|-----|
|          |                                          |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72  | Over 72 and under 84 | 84  |
|          | Melters' helpers, third (cinder pitmen): |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |     |
| 1        | Eastern—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |     |
| 2        | 3 plants . . . . .                       | 1913  | 31                   | 75.0                              | \$0.170                         | \$12.82                            |                                                |                      |                 |    | 4                    | 17  |                      | 10  |
|          |                                          | 1914  | 30                   | 76.7                              | .168                            | 12.94                              |                                                |                      |                 |    |                      | 14  | 8                    | 8   |
| 3        | 5 plants . . . . .                       | 1914  | 50                   | 76.0                              | .176                            | 13.38                              |                                                |                      |                 |    |                      | 24  | 18                   | 8   |
| 4        |                                          | 1915  | 54                   | 76.2                              | .189                            | 14.41                              |                                                |                      |                 |    |                      | 28  | 14                   | 12  |
|          | Pittsburgh—                              |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |     |
| 5        | 5 plants . . . . .                       | 1913  | 184                  | 77.9                              | .226                            | 17.56                              |                                                |                      |                 |    |                      |     | 136                  | 48  |
| 6        |                                          | 1914  | 170                  | 75.6                              | .211                            | 15.85                              |                                                |                      |                 |    |                      | 88  | 50                   | 32  |
|          | 6 plants . . . . .                       | 1914  | 186                  | 76.0                              | .213                            | 16.15                              |                                                |                      |                 |    |                      | 88  | 66                   | 32  |
| 7        |                                          | 1915  | 182                  | 76.3                              | .228                            | 17.35                              |                                                |                      |                 |    |                      | 88  | 58                   | 36  |
|          | G. L. & M. W.—                           |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |     |
| 9        | 6 plants . . . . .                       | 1913  | 183                  | 79.9                              | .218                            | 17.37                              |                                                |                      |                 |    |                      | 51  | 24                   | 108 |
| 10       |                                          | 1914  | 150                  | 79.4                              | .218                            | 17.24                              |                                                |                      |                 |    |                      | 42  | 32                   | 76  |
|          | 7 plants . . . . .                       | 1914  | 158                  | 79.3                              | .217                            | 17.11                              |                                                |                      |                 |    |                      | 42  | 40                   | 76  |
| 11       |                                          | 1915  | 169                  | 79.4                              | .213                            | 16.83                              |                                                |                      |                 |    |                      | 43  | 44                   | 82  |
|          | Southern—                                |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |     |
| 13       | 2 plants . . . . .                       | 1913  | 60                   | 73.4                              | .185                            | 13.59                              |                                                |                      |                 |    |                      | 46  | 14                   |     |
| 14       |                                          | 1914  | 42                   | 77.1                              | .183                            | 14.31                              |                                                |                      |                 |    |                      | 20  | 8                    | 11  |
|          | 3 plants . . . . .                       | 1914  | 48                   | 78.0                              | .181                            | 14.28                              |                                                |                      |                 |    |                      | 20  | 8                    | 20  |
| 15       |                                          | 1915  | 49                   | 78.6                              | .175                            | 13.89                              |                                                |                      |                 |    |                      | 15  | 14                   | 20  |
|          | Total—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |     |
| 17       | 16 plants . . . . .                      | 1913  | 458                  | 77.9                              | .214                            | 16.64                              |                                                |                      |                 |    | 4                    | 114 | 174                  | 166 |
| 18       |                                          | 1914  | 392                  | 77.3                              | .207                            | 16.04                              |                                                |                      |                 |    |                      | 164 | 98                   | 130 |
|          | 21 plants . . . . .                      | 1914  | 442                  | 77.4                              | .207                            | 15.98                              |                                                |                      |                 |    |                      | 174 | 132                  | 136 |
| 19       |                                          | 1915  | 454                  | 77.7                              | .212                            | 16.44                              |                                                |                      |                 |    |                      | 174 | 130                  | 150 |
|          | Stopper setters:                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |     |
|          | Pittsburgh—                              |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |     |
| 21       | 4 plants . . . . .                       | 1913  | 18                   | 77.5                              | .354                            | 27.44                              |                                                |                      |                 |    |                      |     | 18                   |     |
| 22       |                                          | 1914  | 18                   | 72.7                              | .299                            | 21.75                              |                                                |                      |                 |    |                      | 16  | 2                    |     |
| 23       |                                          | 1915  | 18                   | 72.0                              | .318                            | 22.95                              |                                                |                      |                 |    | 8                    | 8   | 2                    |     |
|          | G. L. and M. W.—                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |     |
| 24       | 4 plants . . . . .                       | 1913  | 10                   | 76.8                              | .286                            | 21.86                              |                                                |                      |                 |    |                      | 4   | 4                    | 2   |
| 25       |                                          | 1914  | 10                   | 76.8                              | .286                            | 21.89                              |                                                |                      |                 |    |                      | 4   | 4                    | 2   |
| 26       |                                          | 1915  | 10                   | 76.8                              | .286                            | 21.85                              |                                                |                      |                 |    |                      | 4   | 4                    | 2   |
|          | Southern—                                |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |     |
| 27       | 1 plant . . . . .                        | 1913  | 2                    | 78.0                              | .260                            | 20.28                              |                                                |                      |                 |    |                      |     | 2                    |     |
| 28       |                                          | 1914  | 2                    | 78.0                              | .255                            | 19.89                              |                                                |                      |                 |    |                      |     | 2                    |     |
|          | 2 plants . . . . .                       | 1914  | 4                    | 81.0                              | .237                            | 19.10                              |                                                |                      |                 |    |                      |     | 2                    | 2   |
| 29       |                                          | 1915  | 4                    | 81.0                              | .220                            | 17.78                              |                                                |                      |                 |    |                      |     | 2                    | 2   |
|          | Total—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |     |
| 31       | 9 plants . . . . .                       | 1913  | 30                   | 77.3                              | .325                            | 25.10                              |                                                |                      |                 |    |                      | 4   | 24                   | 2   |
| 32       |                                          | 1914  | 30                   | 74.4                              | .292                            | 21.67                              |                                                |                      |                 |    |                      | 20  | 8                    | 2   |
|          | 10 plants . . . . .                      | 1914  | 32                   | 75.0                              | .287                            | 21.46                              |                                                |                      |                 |    |                      | 20  | 8                    | 4   |
| 33       |                                          | 1915  | 32                   | 74.6                              | .296                            | 21.96                              |                                                |                      |                 |    | 8                    | 12  | 8                    | 4   |
|          | Steel pourers:                           |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |     |
|          | Eastern—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |     |
| 35       | 3 plants . . . . .                       | 1913  | 6                    | 73.8                              | .331                            | 24.24                              |                                                |                      |                 |    | 2                    | 2   |                      | 2   |
| 36       |                                          | 1914  | 6                    | 77.8                              | .317                            | 24.43                              |                                                |                      |                 |    |                      | 2   | 2                    | 2   |
|          | 5 plants . . . . .                       | 1914  | 12                   | 75.9                              | .296                            | 22.42                              |                                                |                      |                 |    |                      | 6   | 4                    | 2   |
| 37       |                                          | 1915  | 12                   | 75.9                              | .317                            | 24.01                              |                                                |                      |                 |    |                      | 6   | 4                    | 2   |
|          | Pittsburgh—                              |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |     |
| 39       | 5 plants . . . . .                       | 1913  | 24                   | 78.1                              | .348                            | 27.13                              |                                                |                      |                 |    |                      |     | 18                   | 6   |
| 40       |                                          | 1914  | 24                   | 74.8                              | .297                            | 22.15                              |                                                |                      |                 |    | 8                    | 8   | 2                    | 6   |
|          | 6 plants . . . . .                       | 1914  | 26                   | 75.7                              | .320                            | 24.32                              |                                                |                      |                 |    | 8                    | 8   | 6                    | 6   |
| 41       |                                          | 1915  | 28                   | 75.7                              | .342                            | 26.15                              |                                                |                      |                 |    | 8                    | 8   | 6                    | 6   |
| 42       |                                          |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |     |



HOURLY AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT,  
HEARTH FURNACES—Continued.

| Employees whose rates of wages per hour were— |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | Line<br>No.    |
|-----------------------------------------------|-----------------------------|------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|----------------------------|----------------|
| 7<br>and<br>under<br>8 cts.                   | 8<br>and<br>under<br>9 cts. | 9<br>and<br>under<br>10 cts. | 10<br>and<br>under<br>12 cts. | 12<br>and<br>under<br>14 cts. | 14<br>and<br>under<br>16 cts. | 16<br>and<br>under<br>18 cts. | 18<br>and<br>under<br>20 cts. | 20<br>and<br>under<br>25 cts. | 25<br>and<br>under<br>30 cts. | 30<br>and<br>under<br>40 cts. | 40<br>and<br>under<br>50 cts. | 50<br>and<br>under<br>60 cts. | 60<br>and<br>under<br>70 cts. | 70<br>cts.<br>and<br>over. |                |
|                                               |                             |                              |                               |                               |                               |                               | 21<br>22                      | 10<br>8                       |                               |                               |                               |                               |                               |                            | 1<br>2         |
|                                               |                             |                              |                               |                               |                               |                               | 32<br>18                      | 18<br>22                      | 14                            |                               |                               |                               |                               |                            | 3<br>4         |
|                                               |                             |                              |                               |                               |                               |                               |                               | 48<br>34                      | 80<br>132                     | 44                            | 12                            |                               |                               |                            | 5<br>6         |
|                                               |                             |                              |                               |                               |                               |                               | 4                             | 34<br>8                       | 148<br>125                    |                               |                               |                               |                               |                            | 7<br>8         |
|                                               |                             |                              |                               |                               |                               |                               |                               | 28<br>24                      | 125<br>90                     | 30<br>35                      |                               |                               |                               |                            | 9<br>10        |
|                                               |                             |                              |                               |                               |                               |                               |                               | 24                            | 8<br>42                       | 90<br>91                      | 36<br>35                      |                               |                               |                            | 11<br>12       |
|                                               |                             |                              |                               |                               |                               | 20<br>12                      | 18<br>12                      |                               | 22<br>18                      |                               |                               |                               |                               |                            | 13<br>14       |
|                                               |                             |                              |                               |                               |                               | 12<br>13                      | 18<br>12                      |                               | 18<br>6                       |                               |                               |                               |                               |                            | 15<br>16       |
|                                               |                             |                              |                               |                               |                               | 20<br>12                      | 67<br>62                      | 58<br>42                      | 227<br>240                    | 74<br>36                      | 12                            |                               |                               |                            | 17<br>18       |
|                                               |                             |                              |                               |                               |                               | 12<br>13                      | 78<br>30                      | 60<br>90                      | 256<br>237                    | 36<br>84                      |                               |                               |                               |                            | 19<br>20       |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               | 6<br>10<br>6                  | 10<br>8<br>12                 | 2                             |                               |                            | 21<br>22<br>23 |
|                                               |                             |                              |                               |                               |                               |                               |                               | 2<br>2<br>2                   | 4<br>6<br>6                   | 4<br>2<br>2                   |                               |                               |                               |                            | 24<br>25<br>26 |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 2<br>2                        |                               |                               |                               |                               |                            | 27<br>28       |
|                                               |                             |                              |                               |                               |                               |                               |                               | 2<br>4                        |                               | 2                             |                               |                               |                               |                            | 29<br>30       |
|                                               |                             |                              |                               |                               |                               |                               |                               | 2<br>2                        | 12<br>18                      | 14<br>10                      | 2                             |                               |                               |                            | 31<br>32       |
|                                               |                             |                              |                               |                               |                               |                               |                               | 4<br>6                        | 18<br>12                      | 10<br>14                      |                               |                               |                               |                            | 33<br>34       |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 2<br>2                        | 2<br>4                        | 2                             |                               |                               |                            | 35<br>36       |
|                                               |                             |                              |                               |                               |                               |                               |                               | 4<br>6                        | 2<br>6                        | 6<br>5                        | 1                             |                               |                               |                            | 37<br>38       |
|                                               |                             |                              |                               |                               |                               |                               |                               | 4                             | 2<br>16                       | 14<br>8                       | 4                             |                               |                               |                            | 39<br>40       |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 16<br>7                       | 8<br>17                       | 4<br>4                        |                               |                               |                            | 41<br>42       |

TABLE F.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER BY YEARS, 1913 TO 1915—OPEN-

| Line No. | Occupation, and number of plants.                           | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|-------------------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Steel pourers—Concl'd.<br>G. L. and M. W.—<br>6 plants..... | 1913  | 18                   | 78.0                              | \$0.372                         | \$29.15                            |                                                |                      |                 |    |                      | 6  | 6                    | 6  |
| 2        |                                                             | 1914  | 18                   | 78.0                              | .356                            | 27.81                              |                                                |                      |                 |    |                      | 6  | 6                    | 6  |
| 3        | 7 plants.....                                               | 1914  | 20                   | 78.0                              | .355                            | 27.67                              |                                                |                      |                 |    |                      | 6  | 8                    | 6  |
| 4        |                                                             | 1915  | 20                   | 75.6                              | .386                            | 29.12                              |                                                |                      |                 |    |                      | 10 | 8                    | 2  |
| 5        | Southern—<br>2 plants.....                                  | 1913  | 8                    | 73.5                              | .462                            | 34.05                              |                                                |                      |                 |    |                      | 6  | 2                    |    |
| 6        |                                                             | 1914  | 8                    | 73.5                              | .444                            | 32.73                              |                                                |                      |                 |    |                      | 6  | 2                    |    |
| 7        | 3 plants.....                                               | 1914  | 10                   | 75.6                              | .416                            | 31.26                              |                                                |                      |                 |    |                      | 6  | 2                    | 2  |
| 8        |                                                             | 1915  | 10                   | 75.6                              | .380                            | 28.65                              |                                                |                      |                 |    |                      | 6  | 2                    | 2  |
| 9        | Total—<br>16 plants.....                                    | 1913  | 56                   | 77.0                              | .370                            | 28.46                              |                                                |                      |                 |    | 2                    | 14 | 26                   | 14 |
| 10       |                                                             | 1914  | 56                   | 75.9                              | .339                            | 25.72                              |                                                |                      |                 |    | 8                    | 22 | 12                   | 14 |
| 11       | 21 plants.....                                              | 1914  | 70                   | 76.4                              | .339                            | 25.94                              |                                                |                      |                 |    | 8                    | 26 | 20                   | 16 |
| 12       |                                                             | 1915  | 70                   | 75.7                              | .356                            | 26.99                              |                                                |                      |                 |    | 8                    | 30 | 20                   | 12 |
| 13       | Mold cappers:<br>Eastern—<br>2 plants.....                  | 1913  | 10                   | 76.6                              | .182                            | 14.03                              |                                                |                      |                 |    | 4                    |    |                      | 6  |
| 14       |                                                             | 1914  | 8                    | 80.8                              | .180                            | 14.57                              |                                                |                      |                 |    |                      |    | 4                    | 4  |
| 15       | Pittsburgh—<br>5 plants.....                                | 1915  | 8                    | 80.8                              | .180                            | 14.57                              |                                                |                      |                 |    |                      |    | 4                    | 4  |
| 16       |                                                             | 1913  | 30                   | 79.1                              | .262                            | 20.61                              |                                                |                      |                 |    |                      |    | 20                   | 10 |
| 17       | 6 plants.....                                               | 1914  | 30                   | 75.8                              | .229                            | 17.29                              |                                                |                      |                 |    | 8                    | 10 | 2                    | 10 |
| 18       |                                                             | 1915  | 38                   | 76.9                              | .231                            | 17.73                              |                                                |                      |                 |    | 8                    | 10 | 10                   | 10 |
| 19       | G. L. and M. W.—<br>5 plants.....                           | 1913  | 38                   | 76.9                              | .252                            | 19.38                              |                                                |                      |                 |    | 8                    | 10 | 10                   | 10 |
| 20       |                                                             | 1914  | 24                   | 78.9                              | .273                            | 21.58                              |                                                |                      |                 |    |                      | 8  | 8                    | 12 |
| 21       | Total—<br>12 plants.....                                    | 1914  | 24                   | 78.0                              | .249                            | 19.45                              |                                                |                      |                 |    |                      | 8  | 8                    | 8  |
| 22       |                                                             | 1915  | 26                   | 73.4                              | .280                            | 20.47                              |                                                |                      |                 |    |                      | 20 | 6                    |    |
| 23       | 13 plants.....                                              | 1913  | 68                   | 78.6                              | .255                            | 20.04                              |                                                |                      |                 |    | 4                    | 8  | 28                   | 28 |
| 24       |                                                             | 1914  | 62                   | 77.3                              | .231                            | 17.78                              |                                                |                      |                 |    | 8                    | 18 | 14                   | 22 |
| 25       | Ladle cranimen:<br>Eastern—<br>4 plants.....                | 1914  | 70                   | 77.7                              | .232                            | 17.96                              |                                                |                      |                 |    | 8                    | 18 | 22                   | 22 |
| 26       |                                                             | 1915  | 72                   | 76.1                              | .254                            | 19.24                              |                                                |                      |                 |    | 8                    | 30 | 20                   | 14 |
| 27       | 6 plants.....                                               | 1913  | 14                   | 74.1                              | .259                            | 19.21                              |                                                |                      |                 |    | 8                    | 2  |                      | 4  |
| 28       |                                                             | 1914  | 16                   | 76.0                              | .242                            | 18.39                              |                                                |                      |                 |    | 6                    | 2  | 4                    | 4  |
| 29       | Pittsburgh—<br>5 plants.....                                | 1914  | 22                   | 75.5                              | .246                            | 18.63                              |                                                |                      |                 |    | 6                    | 6  | 6                    | 4  |
| 30       |                                                             | 1915  | 22                   | 75.5                              | .255                            | 19.27                              |                                                |                      |                 |    | 6                    | 6  | 6                    | 4  |
| 31       | 6 plants.....                                               | 1913  | 38                   | 78.2                              | .338                            | 26.37                              |                                                |                      |                 |    |                      |    | 30                   | 8  |
| 32       |                                                             | 1914  | 38                   | 75.5                              | .295                            | 22.24                              |                                                |                      |                 |    |                      | 4  | 26                   | 8  |
| 33       | G. L. & M. W.—<br>6 plants.....                             | 1914  | 42                   | 76.1                              | .300                            | 22.80                              |                                                |                      |                 |    |                      | 4  | 30                   | 8  |
| 34       |                                                             | 1915  | 42                   | 76.1                              | .320                            | 24.44                              |                                                |                      |                 |    |                      | 4  | 30                   | 8  |
| 35       | 7 plants.....                                               | 1913  | 30                   | 78.4                              | .370                            | 29.08                              |                                                |                      |                 |    |                      | 8  | 8                    | 14 |
| 36       |                                                             | 1914  | 27                   | 78.2                              | .345                            | 26.87                              |                                                |                      |                 |    |                      | 9  | 8                    | 10 |
| 37       | Southern—<br>2 plants.....                                  | 1914  | 29                   | 78.2                              | .343                            | 26.71                              |                                                |                      |                 |    |                      | 9  | 10                   | 10 |
| 38       |                                                             | 1915  | 33                   | 76.4                              | .385                            | 29.44                              |                                                |                      |                 |    |                      | 15 | 12                   | 6  |
| 39       | 3 plants.....                                               | 1913  | 8                    | 73.5                              | .386                            | 28.35                              |                                                |                      |                 |    |                      | 6  | 2                    |    |
| 40       |                                                             | 1914  | 8                    | 73.5                              | .369                            | 27.13                              |                                                |                      |                 |    |                      | 6  | 2                    |    |
| 41       | Total—<br>16 plants.....                                    | 1914  | 11                   | 75.7                              | .344                            | 25.94                              |                                                |                      |                 |    |                      | 6  | 3                    | 2  |
| 42       |                                                             | 1915  | 10                   | 75.6                              | .325                            | 24.42                              |                                                |                      |                 |    |                      | 6  | 2                    | 2  |

HOURLY AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT,  
HEARTH FURNACES—Continued.

| Employees whose rates of wages per hour were— |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | Line<br>No.          |
|-----------------------------------------------|-----------------------------|------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|----------------------------|----------------------|
| 7<br>and<br>under<br>8 cts.                   | 8<br>and<br>under<br>9 cts. | 9<br>and<br>under<br>10 cts. | 10<br>and<br>under<br>12 cts. | 12<br>and<br>under<br>14 cts. | 14<br>and<br>under<br>16 cts. | 16<br>and<br>under<br>18 cts. | 18<br>and<br>under<br>20 cts. | 20<br>and<br>under<br>25 cts. | 25<br>and<br>under<br>30 cts. | 30<br>and<br>under<br>40 cts. | 40<br>and<br>under<br>50 cts. | 50<br>and<br>under<br>60 cts. | 60<br>and<br>under<br>70 cts. | 70<br>cts.<br>and<br>over. |                      |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            |                      |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               | 12<br>16                      | 6<br>2                        |                               |                               |                            | 1<br>2               |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               | 18<br>11                      | 2<br>9                        |                               |                               |                            | 3<br>4               |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               | 4<br>4                        |                               | 4<br>4                        |                               |                            | 5<br>6               |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               | 6<br>4                        |                               | 4                             |                               |                            | 7<br>8               |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 2                             |                               | 4                             |                               |                               |                            |                      |
|                                               |                             |                              |                               |                               |                               |                               |                               | 4                             | 4<br>18                       | 32<br>32                      | 12<br>2                       | 4<br>4                        |                               |                            | 9<br>10              |
|                                               |                             |                              |                               |                               |                               |                               |                               | 4                             | 18<br>15                      | 38<br>37                      | 6<br>18                       | 4                             |                               |                            | 11<br>12             |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            |                      |
|                                               |                             |                              |                               |                               |                               | 2<br>2<br>2                   | 8<br>6<br>6                   |                               |                               |                               |                               |                               |                               |                            | 13<br>14<br>15       |
|                                               |                             |                              |                               |                               |                               |                               | 4                             | 14<br>22                      | 2<br>8                        | 10                            |                               |                               |                               |                            | 16<br>17             |
|                                               |                             |                              |                               |                               |                               |                               |                               | 30<br>11                      | 8<br>27                       |                               |                               |                               |                               |                            | 18<br>19             |
|                                               |                             |                              |                               |                               |                               |                               |                               | 8<br>12<br>9                  | 14<br>12<br>10                | 6<br>7                        |                               |                               |                               |                            | 20<br>21<br>22       |
|                                               |                             |                              |                               |                               |                               | 2<br>2<br>2                   | 12<br>6<br>6                  | 22<br>34<br>20                | 16<br>20<br>37                | 16                            |                               |                               |                               |                            | 23<br>24<br>25<br>26 |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            |                      |
|                                               |                             |                              |                               |                               |                               |                               |                               | 8<br>1                        | 4<br>7                        | 2<br>2                        |                               |                               |                               |                            | 27<br>28             |
|                                               |                             |                              |                               |                               |                               |                               |                               | 6<br>6                        | 5<br>1                        | 7<br>11                       | 4<br>4                        |                               |                               |                            | 29<br>30             |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               | 38<br>14                      |                               |                               |                            | 31<br>32             |
|                                               |                             |                              |                               |                               |                               |                               |                               | 4                             | 20<br>12                      | 18<br>28                      |                               |                               |                               |                            | 33<br>34             |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 2<br>2                        | 24<br>24                      | 4                             |                               |                               |                            | 35<br>36             |
|                                               |                             |                              |                               |                               |                               |                               |                               | 1                             | 2<br>2                        | 26<br>18                      |                               | 13                            |                               |                            | 37<br>38             |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               | 8<br>8                        |                               |                               |                               |                            | 39<br>40             |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               | 3<br>2                        | 8<br>8                        |                               |                               |                            | 41<br>42             |

TABLE F.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER  
BY YEARS, 1913 TO 1915—OPEN-

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
|          | Ladle cranemen—Con. Total—        |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 1        | 17 plants .....                   | 1913  | 90                   | 77.2                              | \$0.341                         | \$26.34                            |                                                |                      |                 |    | 8                    | 16 | 40                   | 26 |
| 2        |                                   | 1914  | 89                   | 76.2                              | .307                            | 23.39                              |                                                |                      |                 |    | 6                    | 21 | 40                   | 22 |
| 3        | 22 plants.....                    | 1914  | 104                  | 76.5                              | .305                            | 23.34                              |                                                |                      |                 |    | 6                    | 25 | 49                   | 24 |
| 4        |                                   | 1915  | 107                  | 76.0                              | .327                            | 24.92                              |                                                |                      |                 |    | 6                    | 31 | 50                   | 20 |
|          | Ingot strippers: Eastern—         |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 5        | 1 plant .....                     | 1913  | 6                    | 79.0                              | .183                            | 14.48                              |                                                |                      |                 |    |                      |    | 6                    |    |
| 6        |                                   | 1914  | 6                    | 79.0                              | .185                            | 14.62                              |                                                |                      |                 |    |                      |    | 6                    |    |
| 7        | 2 plants.....                     | 1914  | 8                    | 78.8                              | .219                            | 17.20                              |                                                |                      |                 |    |                      |    | 8                    |    |
| 8        |                                   | 1915  | 8                    | 78.8                              | .226                            | 17.73                              |                                                |                      |                 |    |                      |    | 8                    |    |
| 9        | Pittsburgh—5 plants.....          | 1913  | 17                   | 72.7                              | .352                            | 25.07                              |                                                |                      |                 |    | 8                    |    |                      | 6  |
| 10       |                                   | 1914  | 17                   | 71.9                              | .355                            | 23.44                              |                                                | 3                    |                 |    | 8                    | 2  |                      | 4  |
| 11       | 6 plants.....                     | 1914  | 19                   | 72.9                              | .332                            | 23.54                              |                                                | 3                    |                 |    | 8                    | 4  |                      | 4  |
| 12       |                                   | 1915  | 19                   | 73.6                              | .338                            | 24.40                              |                                                | 3                    |                 |    | 8                    | 2  |                      | 6  |
| 13       | G. L. and M. W—6 plants.....      | 1913  | 14                   | 78.9                              | .287                            | 22.53                              |                                                |                      |                 |    | 4                    | 4  |                      | 6  |
| 14       |                                   | 1914  | 12                   | 77.0                              | .279                            | 21.43                              |                                                |                      |                 |    | 4                    | 6  | 2                    |    |
| 15       | 7 plants.....                     | 1914  | 14                   | 77.1                              | .285                            | 21.97                              |                                                |                      |                 |    | 4                    | 8  | 2                    |    |
| 16       |                                   | 1915  | 15                   | 77.6                              | .317                            | 24.53                              |                                                |                      |                 |    | 4                    | 8  | 3                    |    |
| 17       | Southern—2 plants.....            | 1913  | 4                    | 75.0                              | .322                            | 23.90                              |                                                |                      |                 |    | 2                    | 2  |                      |    |
| 18       |                                   | 1914  | 4                    | 75.0                              | .308                            | 22.90                              |                                                |                      |                 |    | 2                    | 2  |                      |    |
| 19       | 3 plants.....                     | 1914  | 6                    | 78.0                              | .278                            | 21.37                              |                                                |                      |                 |    | 2                    | 2  |                      | 2  |
| 20       |                                   | 1915  | 6                    | 78.0                              | .258                            | 19.87                              |                                                |                      |                 |    | 2                    | 2  |                      | 2  |
| 21       | Total—14 plants.....              | 1913  | 41                   | 76.0                              | .302                            | 22.54                              |                                                | 3                    |                 |    |                      | 14 | 12                   | 12 |
| 22       |                                   | 1914  | 39                   | 74.9                              | .292                            | 21.41                              |                                                | 3                    |                 |    |                      | 14 | 16                   | 6  |
| 23       | 18 plants.....                    | 1914  | 47                   | 75.8                              | .292                            | 21.72                              |                                                | 3                    |                 |    |                      | 14 | 12                   | 8  |
| 24       |                                   | 1915  | 48                   | 76.3                              | .303                            | 22.76                              |                                                | 3                    |                 |    |                      | 14 | 20                   | 11 |
|          | Engineers, locomotive: Eastern—   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 25       | 3 plants.....                     | 1913  | 16                   | 74.3                              | .239                            | 17.64                              |                                                |                      |                 |    | 12                   |    |                      | 4  |
| 26       |                                   | 1914  | 14                   | 74.9                              | .238                            | 17.74                              |                                                |                      |                 |    | 8                    | 2  |                      | 4  |
| 27       | 5 plants.....                     | 1914  | 21                   | 75.0                              | .229                            | 17.10                              |                                                |                      |                 |    | 8                    | 5  | 4                    | 4  |
| 28       |                                   | 1915  | 22                   | 74.9                              | .233                            | 17.36                              |                                                |                      |                 |    | 8                    | 6  | 4                    | 4  |
| 29       | Pittsburgh—5 plants.....          | 1913  | 58                   | 77.8                              | .310                            | 24.10                              |                                                |                      |                 |    | 2                    |    | 48                   | 8  |
| 30       |                                   | 1914  | 58                   | 76.2                              | .288                            | 21.99                              |                                                |                      |                 |    | 6                    |    | 42                   | 10 |
| 31       | 6 plants.....                     | 1914  | 62                   | 76.6                              | .292                            | 22.39                              |                                                |                      |                 |    | 6                    |    | 46                   | 10 |
| 32       |                                   | 1915  | 62                   | 76.9                              | .297                            | 22.91                              |                                                |                      |                 |    |                      | 6  | 46                   | 10 |
| 33       | G. L. and M. W—6 plants.....      | 1913  | 38                   | 77.6                              | .277                            | 21.46                              |                                                |                      |                 |    |                      | 10 | 10                   | 8  |
| 34       |                                   | 1914  | 32                   | 78.4                              | .284                            | 22.19                              |                                                |                      |                 |    |                      | 10 | 10                   | 12 |
| 35       | 7 plants.....                     | 1914  | 36                   | 78.3                              | .280                            | 21.90                              |                                                |                      |                 |    |                      | 10 | 14                   | 12 |
| 36       |                                   | 1915  | 36                   | 78.3                              | .280                            | 21.91                              |                                                |                      |                 |    |                      | 10 | 14                   | 12 |
| 37       | Southern—2 plants.....            | 1913  | 17                   | 73.4                              | .323                            | 23.65                              |                                                |                      |                 |    | 13                   | 4  |                      |    |
| 38       |                                   | 1914  | 15                   | 73.6                              | .314                            | 22.99                              |                                                |                      |                 |    | 12                   | 2  |                      | 1  |
| 39       | 3 plants.....                     | 1914  | 18                   | 74.7                              | .307                            | 22.81                              |                                                |                      |                 |    |                      | 13 | 2                    | 3  |
| 40       |                                   | 1915  | 18                   | 78.0                              | .274                            | 21.41                              |                                                |                      |                 |    |                      | 7  | 4                    | 7  |
|          | Total—16 plants.....              | 1913  | 119                  | 76.6                              | .295                            | 22.55                              |                                                |                      |                 |    | 14                   | 23 | 62                   | 20 |
| 41       |                                   | 1914  | 119                  | 76.3                              | .284                            | 21.67                              |                                                |                      |                 |    | 14                   | 24 | 54                   | 27 |
| 43       | 21 plants.....                    | 1914  | 137                  | 76.5                              | .281                            | 21.51                              |                                                |                      |                 |    | 14                   | 28 | 66                   | 29 |
| 44       |                                   | 1915  | 138                  | 77.1                              | .279                            | 21.57                              |                                                |                      |                 |    | 8                    | 29 | 68                   | 33 |

HOURLY AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT,  
HEARTH FURNACES—Continued.

| Employees whose rates of wages per hour were— |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | Line<br>No. |
|-----------------------------------------------|-----------------------------|------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|----------------------------|-------------|
| 7<br>and<br>under<br>8 cts.                   | 8<br>and<br>under<br>9 cts. | 9<br>and<br>under<br>10 cts. | 10<br>and<br>under<br>12 cts. | 12<br>and<br>under<br>14 cts. | 14<br>and<br>under<br>16 cts. | 16<br>and<br>under<br>18 cts. | 18<br>and<br>under<br>20 cts. | 20<br>and<br>under<br>25 cts. | 25<br>and<br>under<br>30 cts. | 30<br>and<br>under<br>40 cts. | 40<br>and<br>under<br>50 cts. | 50<br>and<br>under<br>60 cts. | 60<br>and<br>under<br>70 cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                             |                              |                               |                               |                               |                               |                               | 8<br>6                        | 6<br>29                       | 72<br>48                      | 4                             |                               |                               |                            | 1           |
|                                               |                             |                              |                               |                               |                               |                               |                               | 6                             |                               |                               |                               |                               |                               |                            | 2           |
|                                               |                             |                              |                               |                               |                               |                               |                               | 6<br>6                        | 10<br>3                       | 32<br>27                      | 56<br>58                      |                               |                               |                            | 3           |
|                                               |                             |                              |                               |                               |                               |                               |                               | 6<br>6                        |                               |                               | 13                            |                               |                               |                            | 4           |
|                                               |                             |                              |                               |                               |                               |                               |                               | 6<br>6                        |                               |                               |                               |                               |                               |                            | 5           |
|                                               |                             |                              |                               |                               |                               |                               |                               | 6<br>6                        |                               |                               |                               |                               |                               |                            | 6           |
|                                               |                             |                              |                               |                               |                               |                               |                               | 6                             |                               |                               |                               |                               |                               |                            | 7           |
|                                               |                             |                              |                               |                               |                               | 2                             |                               |                               |                               | 2<br>2                        |                               |                               |                               |                            | 8           |
|                                               |                             |                              |                               |                               |                               |                               |                               | 4                             |                               |                               |                               |                               |                               |                            | 9           |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 3<br>6                        | 10<br>6                       | 4<br>3                        |                               |                               |                            | 10          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 2                             |                               |                               |                               |                               |                               |                            | 11          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 2                             | 6<br>2                        | 8<br>12                       | 3<br>3                        |                               |                               |                            | 12          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 2                             | 8<br>9                        | 3<br>3                        | 1                             |                               |                               |                            | 13          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 9<br>9                        | 5<br>4                        | 2                             |                               |                               |                            | 14          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 2                             |                               |                               |                               |                               |                            | 15          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 2                             |                               | 2<br>2                        |                               |                               |                               |                            | 16          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 4                             |                               |                               |                               |                               |                               |                            | 17          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 4                             |                               | 2                             |                               |                               |                               |                            | 18          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 4                             |                               | 2                             |                               |                               |                               |                            | 19          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 4                             |                               | 2                             |                               |                               |                               |                            | 20          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 6<br>6                        | 2<br>4                        | 13<br>15                      | 15<br>11                      | 5<br>3                        |                               |                            | 21          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 6                             | 6                             | 15                            | 17                            | 3                             |                               |                            | 22          |
|                                               |                             |                              |                               |                               |                               | 2                             |                               | 10                            | 11                            | 20                            | 5                             |                               |                               |                            | 23          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 24          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 2                             | 10<br>10                      | 4<br>4                        |                               |                               |                               |                            | 25          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 17<br>12                      | 4<br>6                        |                               |                               |                               |                            | 26          |
|                                               |                             |                              |                               |                               |                               |                               | 4                             |                               |                               |                               |                               |                               |                               |                            | 27          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 28          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 24<br>34                      |                               | 34<br>24                      |                               |                               |                            | 29          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 34<br>38                      | 28<br>24                      |                               |                               |                               |                            | 30          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 31          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 4<br>4                        | 16<br>18                      | 8<br>10                       |                               |                               |                               |                            | 32          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 4<br>4                        | 22<br>22                      | 10<br>10                      |                               |                               |                               |                            | 33          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 4<br>3                        | 13<br>12                      |                               |                               |                               |                            | 34          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 6<br>9                        | 12<br>5                       |                               |                               |                               |                            | 35          |
|                                               |                             |                              |                               |                               |                               |                               |                               | 2                             | 14<br>14                      | 48<br>59                      | 55<br>46                      |                               |                               |                            | 36          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               | 21<br>20                      | 66<br>75                      | 50<br>39                      |                               |                               |                            | 37          |
|                                               |                             |                              |                               |                               |                               |                               | 4                             |                               |                               |                               |                               |                               |                               |                            | 38          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 39          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 40          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 41          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 42          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 43          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | 44          |

TABLE F.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER BY YEARS, 1913 TO 1915—OPEN-

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |     |                      |     |                      |     |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-----|----------------------|-----|----------------------|-----|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under                                   | Over 48 and under 56 | 56 and under 60 | 60  | Over 60 and under 72 | 72  | Over 72 and under 84 | 84  |
| 1        | Switchmen: Eastern—               |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |     |
| 2        | 3 plants.....                     | 1913  | 16                   | 74.3                              | \$0.193                         | \$14.28                            |                                                |                      |                 |     | 12                   |     |                      | 4   |
|          |                                   | 1914  | 14                   | 74.9                              | .189                            | 14.05                              |                                                |                      |                 |     | 8                    | 2   |                      | 4   |
| 3        | 5 plants.....                     | 1914  | 21                   | 75.0                              | .191                            | 14.26                              |                                                |                      |                 |     | 8                    | 5   | 4                    | 4   |
| 4        |                                   | 1915  | 22                   | 74.9                              | .196                            | 14.62                              |                                                |                      |                 |     | 8                    | 6   | 4                    | 4   |
| 5        | Pittsburgh—                       |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |     |
| 6        | 5 plants.....                     | 1913  | 66                   | 77.0                              | .228                            | 17.57                              |                                                |                      |                 |     | 4                    | 6   | 48                   | 8   |
|          |                                   | 1914  | 66                   | 75.7                              | .220                            | 16.67                              |                                                |                      |                 |     | 8                    | 6   | 42                   | 10  |
| 7        | 6 plants.....                     | 1914  | 70                   | 76.0                              | .224                            | 17.03                              |                                                |                      |                 |     | 8                    | 6   | 46                   | 10  |
| 8        |                                   | 1915  | 70                   | 76.4                              | .228                            | 17.48                              |                                                |                      |                 |     |                      | 14  | 46                   | 10  |
| 9        | G. L. and M. W.—                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |     |
| 10       | 6 plants.....                     | 1913  | 28                   | 77.6                              | .237                            | 18.37                              |                                                |                      |                 |     |                      | 10  | 10                   | 8   |
|          |                                   | 1914  | 36                   | 79.0                              | .244                            | 19.27                              |                                                |                      |                 |     |                      | 10  | 10                   | 16  |
| 11       | 7 plants.....                     | 1914  | 40                   | 78.9                              | .239                            | 18.82                              |                                                |                      |                 |     |                      | 10  | 14                   | 16  |
| 12       |                                   | 1915  | 40                   | 78.9                              | .235                            | 18.55                              |                                                |                      |                 |     |                      | 10  | 14                   | 16  |
| 13       | Southern—                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |     |
| 14       | 2 plants.....                     | 1913  | 17                   | 73.4                              | .263                            | 19.22                              |                                                |                      |                 |     |                      | 13  | 4                    |     |
|          |                                   | 1914  | 15                   | 73.6                              | .253                            | 18.55                              |                                                |                      |                 |     |                      | 12  | 2                    | 1   |
| 15       | 3 plants.....                     | 1914  | 18                   | 74.7                              | .248                            | 18.43                              |                                                |                      |                 |     |                      | 13  | 2                    | 3   |
| 16       |                                   | 1915  | 18                   | 78.0                              | .223                            | 17.32                              |                                                |                      |                 |     |                      | 7   | 4                    | 7   |
| 17       | Total—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |     |
| 18       | 16 plants.....                    | 1913  | 127                  | 76.3                              | .230                            | 17.55                              |                                                |                      |                 |     | 16                   | 29  | 62                   | 20  |
|          |                                   | 1914  | 131                  | 76.3                              | .227                            | 17.32                              |                                                |                      |                 |     | 16                   | 30  | 54                   | 31  |
| 19       | 21 plants.....                    | 1914  | 149                  | 76.5                              | .226                            | 17.29                              |                                                |                      |                 |     | 16                   | 34  | 66                   | 33  |
| 20       |                                   | 1915  | 150                  | 77.0                              | .225                            | 17.33                              |                                                |                      |                 |     | 8                    | 37  | 68                   | 37  |
| 21       | Laborers: Eastern—                |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |     |
| 22       | 4 plants.....                     | 1913  | 113                  | 63.1                              | .168                            | 10.49                              |                                                | 35                   | 10              | 10  | 41                   | 2   | 15                   |     |
|          |                                   | 1914  | 46                   | 65.1                              | .168                            | 10.81                              |                                                | 15                   | 7               | 5   |                      |     | 19                   |     |
| 23       | 6 plants.....                     | 1914  | 58                   | 67.2                              | .169                            | 11.29                              | 1                                              | 15                   | 7               | 8   |                      |     | 19                   | 8   |
| 24       |                                   | 1915  | 46                   | 64.3                              | .171                            | 10.90                              |                                                | 11                   | 18              |     | 1                    | 3   | 7                    | 6   |
| 25       | Pittsburgh—                       |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |     |
| 26       | 5 plants.....                     | 1913  | 424                  | 78.5                              | .190                            | 14.86                              |                                                |                      |                 | 2   | 4                    | 94  | 202                  | 122 |
|          |                                   | 1914  | 382                  | 71.9                              | .187                            | 13.50                              |                                                |                      |                 | 62  | 86                   | 16  | 218                  |     |
| 27       | 6 plants.....                     | 1914  | 414                  | 71.3                              | .188                            | 13.38                              |                                                |                      |                 | 94  | 86                   | 16  | 218                  |     |
| 28       |                                   | 1915  | 349                  | 72.8                              | .193                            | 13.98                              |                                                |                      | 1               | 34  | 120                  | 15  | 179                  |     |
| 29       | G. L. and M. W.—                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |     |
| 30       | 6 plants.....                     | 1913  | 214                  | 79.0                              | .190                            | 15.01                              |                                                |                      |                 | 6   | 10                   | 56  | 17                   | 125 |
|          |                                   | 1914  | 213                  | 69.4                              | .192                            | 13.32                              |                                                |                      | 62              | 26  | 25                   | 19  | 34                   | 47  |
| 31       | 7 plants.....                     | 1914  | 221                  | 69.5                              | .191                            | 13.30                              |                                                |                      | 65              | 26  | 25                   | 19  | 39                   | 47  |
| 32       |                                   | 1915  | 235                  | 71.9                              | .191                            | 13.74                              |                                                |                      | 26              | 43  | 37                   | 21  | 31                   | 77  |
| 33       | Southern—                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |     |
| 34       | 2 plants.....                     | 1913  | 49                   | 73.7                              | .152                            | 11.02                              |                                                |                      |                 | 20  |                      | 2   |                      | 27  |
|          |                                   | 1914  | 31                   | 74.7                              | .152                            | 11.22                              |                                                |                      |                 | 12  |                      |     |                      | 19  |
| 35       | 3 plants.....                     | 1914  | 112                  | 64.3                              | .169                            | 10.75                              |                                                |                      |                 | 91  | 1                    |     |                      | 20  |
| 36       |                                   | 1915  | 93                   | 63.4                              | .158                            | 9.99                               |                                                |                      |                 | 78  | 1                    | 2   |                      | 12  |
| 37       | Total—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |     |
| 38       | 17 plants.....                    | 1913  | 800                  | 76.2                              | .185                            | 14.05                              |                                                | 35                   | 10              | 38  | 55                   | 154 | 234                  | 274 |
|          |                                   | 1914  | 672                  | 70.8                              | .186                            | 13.15                              |                                                | 15                   | 69              | 105 | 111                  | 35  | 271                  | 66  |
| 39       | 22 plants.....                    | 1914  | 805                  | 69.5                              | .185                            | 12.84                              | 1                                              | 15                   | 72              | 219 | 112                  | 35  | 276                  | 75  |
| 40       |                                   | 1915  | 723                  | 70.8                              | .186                            | 13.19                              |                                                | 11                   | 45              | 155 | 159                  | 41  | 217                  | 95  |



180 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

TABLE F.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER BY YEARS, 1910 TO 1915—OPEN-

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                       |                  |       |                       |     |                       |     |  |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|-----------------------|------------------|-------|-----------------------|-----|-----------------------|-----|--|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56. | 56 and under 60. | 60    | Over 60 and under 72. | 72  | Over 72 and under 84. | 84  |  |
|          | Unclassified—productive:          |       |                      |                                   |                                 |                                    |                                                |                       |                  |       |                       |     |                       |     |  |
| 1        | Eastern—                          | 1914  | 308                  | 71.2                              | \$0.212                         | \$15.06                            | 2                                              | 12                    | 4                | 4     | 70                    | 171 | 35                    | 10  |  |
| 2        | 6 plants.....                     | 1915  | 341                  | 71.7                              | .231                            | 16.57                              | .....                                          | 13                    | 4                | ..... | 62                    | 209 | 40                    | 13  |  |
| 3        | Pittsburgh—                       | 1914  | 349                  | 78.3                              | .213                            | 16.71                              | .....                                          | .....                 | 6                | ..... | 13                    | 56  | 166                   | 108 |  |
| 4        | 6 plants.....                     | 1915  | 331                  | 77.9                              | .225                            | 17.53                              | .....                                          | .....                 | 6                | 1     | 34                    | 35  | 165                   | 190 |  |
| 5        | G. L. and M. W.—                  | 1914  | 128                  | 77.2                              | .237                            | 18.22                              | .....                                          | .....                 | 5                | 2     | 6                     | 36  | 28                    | 51  |  |
| 6        | 7 plants.....                     | 1915  | 176                  | 77.9                              | .223                            | 18.04                              | .....                                          | .....                 | 2                | 2     | 10                    | 43  | 49                    | 70  |  |
| 7        | Southern—                         | 1914  | 64                   | 74.4                              | .217                            | 16.01                              | .....                                          | .....                 | .....            | 2     | .....                 | 45  | 4                     | 13  |  |
| 8        | 3 plants.....                     | 1915  | 69                   | 75.7                              | .204                            | 15.40                              | .....                                          | .....                 | .....            | ..... | .....                 | 45  | 6                     | 18  |  |
| 9        | Total—                            | 1914  | 849                  | 75.3                              | .217                            | 16.29                              | 2                                              | 12                    | 15               | 8     | 89                    | 308 | 233                   | 182 |  |
| 10       | 22 plants.....                    | 1915  | 917                  | 75.4                              | .227                            | 17.11                              | .....                                          | 13                    | 12               | 3     | 106                   | 332 | 260                   | 191 |  |
|          | Unclassified—nonproductive:       |       |                      |                                   |                                 |                                    |                                                |                       |                  |       |                       |     |                       |     |  |
| 11       | Eastern—                          | 1914  | 265                  | 68.9                              | .235                            | 15.96                              | 2                                              | 35                    | 72               | 6     | 31                    | 7   | 64                    | 48  |  |
| 12       | 6 plants.....                     | 1915  | 259                  | 67.1                              | .236                            | 15.34                              | .....                                          | 64                    | 59               | 8     | 19                    | 9   | 48                    | 52  |  |
| 13       | Pittsburgh—                       | 1914  | 268                  | 78.1                              | .226                            | 17.61                              | .....                                          | .....                 | 7                | 12    | 48                    | 19  | 38                    | 144 |  |
| 14       | 6 plants.....                     | 1915  | 273                  | 77.1                              | .239                            | 18.44                              | .....                                          | 7                     | 4                | 9     | 51                    | 17  | 55                    | 130 |  |
| 15       | G. L. and M. W.—                  | 1914  | 435                  | 71.1                              | .228                            | 16.03                              | .....                                          | .....                 | 98               | 15    | 26                    | 185 | 16                    | 95  |  |
| 16       | 6 plants.....                     | 1915  | 457                  | 68.9                              | .233                            | 15.97                              | .....                                          | .....                 | 71               | 79    | 69                    | 180 | 6                     | 52  |  |
| 17       | Southern—                         | 1914  | 173                  | 76.4                              | .213                            | 15.96                              | 3                                              | 1                     | .....            | 38    | 3                     | 15  | 3                     | 110 |  |
| 18       | 3 plants.....                     | 1915  | 159                  | 76.3                              | .216                            | 15.81                              | 7                                              | 3                     | .....            | 24    | 1                     | 21  | 5                     | 98  |  |
| 19       | Total—                            | 1914  | 1,141                | 73.1                              | .227                            | 16.37                              | 5                                              | 36                    | 177              | 71    | 108                   | 226 | 121                   | 397 |  |
| 20       | 21 plants.....                    | 1915  | 1,148                | 71.5                              | .233                            | 16.39                              | 7                                              | 74                    | 134              | 120   | 140                   | 227 | 114                   | 332 |  |

<sup>1</sup> Including 1 employee whose full-time hours per week were 98.



HOURLY AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT,  
HEARTH FURNACES—Concluded.

| Employees whose rates of wages per hour were— |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            | Line<br>No. |
|-----------------------------------------------|-----------------------------|------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|----------------------------|-------------|
| 7<br>and<br>under<br>8 cts.                   | 8<br>and<br>under<br>9 cts. | 9<br>and<br>under<br>10 cts. | 10<br>and<br>under<br>12 cts. | 12<br>and<br>under<br>14 cts. | 14<br>and<br>under<br>16 cts. | 16<br>and<br>under<br>18 cts. | 18<br>and<br>under<br>20 cts. | 20<br>and<br>under<br>25 cts. | 25<br>and<br>under<br>30 cts. | 30<br>and<br>under<br>40 cts. | 40<br>and<br>under<br>50 cts. | 50<br>and<br>under<br>60 cts. | 60<br>and<br>under<br>70 cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            |             |
|                                               |                             |                              |                               |                               |                               | 12                            | 35                            | 62                            | 154                           | 41                            | 2                             | 1                             |                               |                            | 1           |
|                                               |                             |                              |                               |                               |                               | 13                            | 34                            | 50                            | 107                           | 124                           | 12                            | 1                             |                               |                            | 2           |
|                                               |                             |                              |                               |                               |                               |                               | 36                            | 48                            | 208                           | 52                            | 5                             |                               |                               |                            | 3           |
|                                               |                             |                              |                               |                               |                               |                               | 22                            | 35                            | 179                           | 68                            | 27                            |                               |                               |                            | 4           |
|                                               |                             |                              |                               |                               |                               |                               | 3                             | 26                            | 63                            | 18                            | 16                            |                               | 2                             |                            | 5           |
|                                               |                             |                              |                               |                               |                               |                               | 14                            | 31                            | 80                            | 22                            | 27                            | 2                             |                               |                            | 6           |
|                                               |                             |                              |                               |                               | 5                             | 8                             | 13                            | 6                             | 15                            | 6                             | 11                            |                               |                               |                            | 7           |
|                                               |                             |                              |                               |                               | 2                             | 15                            | 9                             | 7                             | 22                            | 10                            | 4                             |                               |                               |                            | 8           |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            |             |
|                                               |                             |                              |                               |                               | 5                             | 20                            | 88                            | 142                           | 440                           | 117                           | 34                            | 1                             | 2                             |                            | 9           |
|                                               |                             |                              |                               |                               | 2                             | 23                            | 79                            | 123                           | 388                           | 224                           | 70                            | 3                             |                               |                            | 10          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            |             |
|                                               |                             |                              |                               |                               |                               | 10                            | 29                            | 39                            | 76                            | 74                            | 15                            | 22                            |                               |                            | 11          |
|                                               |                             |                              |                               |                               | 5                             | 17                            | 40                            | 33                            | 70                            | 58                            | 20                            | 15                            |                               | 1                          | 12          |
|                                               |                             |                              |                               |                               |                               |                               | 73                            | 20                            | 92                            | 42                            | 39                            | 2                             |                               |                            | 13          |
|                                               |                             |                              |                               |                               |                               | 2                             | 16                            | 25                            | 132                           | 58                            | 38                            | 2                             |                               |                            | 14          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            |             |
|                                               |                             |                              |                               |                               |                               |                               | 50                            | 76                            | 219                           | 41                            | 24                            | 19                            | 6                             |                            | 15          |
|                                               |                             |                              |                               |                               |                               |                               | 4                             | 142                           | 203                           | 48                            | 23                            | 31                            | 6                             |                            | 16          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            |             |
|                                               |                             |                              |                               |                               | 1                             | 16                            | 64                            | 9                             | 51                            | 10                            | 19                            | 1                             |                               | 2                          | 17          |
|                                               |                             |                              |                               |                               |                               | 25                            | 63                            | 11                            | 28                            | 10                            | 15                            | 1                             |                               | 6                          | 18          |
|                                               |                             |                              |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                            |             |
|                                               |                             |                              |                               |                               | 1                             | 26                            | 216                           | 144                           | 438                           | 167                           | 97                            | 44                            | 6                             | 2                          | 19          |
|                                               |                             |                              |                               |                               | 5                             | 44                            | 123                           | 211                           | 433                           | 174                           | 96                            | 49                            | 6                             | 7                          | 20          |

<sup>2</sup> Including 1 employee whose full-time hours per week were 91.

## PUDDLING MILLS.<sup>1</sup>

### SUMMARY.

Wages and hours of labor in the puddling-mill department are presented for the first time in this series of reports. Figures are given for 1914 and 1915.

The puddling mill produces wrought iron by oxidizing and removing most of the silicon, carbon, manganese, and phosphorus contained in pig iron, the operation being conducted on the hearth of a reverberatory furnace.

Puddlers work in different combinations in the various plants: First, puddler and helper, the puddler receiving a larger tonnage rate than the helper; second, two puddlers, dividing the earnings equally—"level-handed"; third, two puddlers ("level-handed") with a helper; fourth, three puddlers, dividing the earnings into three equal shares—"three-handed."

The busheling process is practically the same as the puddling, except that scrap iron is charged instead of pig iron and that each heat requires a shorter time.

The depression which affected other departments of the industry in 1914 and 1915 was felt to even a greater degree in puddling mills and in addition labor troubles caused the closing of some mills for several months.

Considering the department as a whole, full-time weekly earnings of all employees combined were 5 per cent lower in 1915 than in 1914, rates of wages per hour being 4 per cent lower and full-time hours per week 2 per cent lower. Comparing the various separate occupation groups there were reductions of from 1 to 12 per cent in the full-time weekly earnings of employees in 16 groups in 1915 as compared with 1914, increases of from 1 to 12 per cent in 9 groups, and weekly earnings in one group were unchanged. These facts are shown in the table of relative numbers on pages 185 and 186.

The most significant facts appearing in this chapter concerning the several occupations of the puddling-mill department are summarized in averages and percentages in the table following. Data are presented from identical plants for the years 1914 and 1915. The figures for 1914 represent 4,606 employees, and for 1915, 4,472 employees, in 26 specified occupations, covering all occupations of a puddling mill, including muck rolling and shearing. The information on which the figures are based was obtained from 29 plants having 754 furnaces, capable of producing 49 per cent of the total tonnage of all

<sup>1</sup> Summary figures relating to this department are given with figures for other departments of the iron and steel industry on pages 7 to 26; an account of the volume of employment in this and other departments from July, 1913, to June, 1915, is given on pages 26 to 55; and an explanation of the scope of the investigation and of the methods employed is given on pages 55 to 59.

puddle furnaces in the United States. In this report a double furnace is counted as 2 single furnaces.

In Table 22, which follows, occupations are grouped according to the wages paid, beginning with the lowest-paid group, and the occupations in each group are presented in alphabetical order. Classified full-time hours per week and rates of wages per hour are shown by percentages, which were computed from the actual figures given in Table G.

TABLE 22.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1914 AND 1915—PUDDLING MILLS.

| Occupation, and number of plants.             | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |                 |                 |                 | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                      | Average full-time weekly earnings. |
|-----------------------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|----------------------|-----------------|-----------------|-----------------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|----------------------|------------------------------------|
|                                               |       |                      |                                   | 48 and under.                                              | Over 48 and under 56 | 56 and under 60 | 60 and under 72 | 72 and under 84 |                                 | 12 and under 14 cts.                                | 14 and under 16 cts. | 16 and under 18 cts. | 18 and under 20 cts. | 20 and under 25 cts. |                                    |
| Laborers:<br>24 plants.....                   | 1914  | 322                  | 59.5                              | .....                                                      | 18                   | 18              | 63              | 1               | \$0.173                         | 4                                                   | 9                    | 56                   | 9                    | 23                   | \$10.35                            |
|                                               | 1915  | 303                  | 57.5                              | .....                                                      | 35                   | 14              | 51              | .....           | .167                            | 3                                                   | 36                   | 38                   | 6                    | 17                   | 9.66                               |
| Bloom boys:<br>25 plants.....                 | 1914  | 77                   | 54.3                              | 16                                                         | 53                   | 19              | 11              | .....           | .201                            | 34                                                  | 18                   | 36                   | 12                   | .....                | 10.79                              |
|                                               | 1915  | 68                   | 53.9                              | 18                                                         | 49                   | 19              | 15              | .....           | .199                            | 26                                                  | 21                   | 44                   | 9                    | .....                | 10.62                              |
| Bushelers' helpers:<br>12 plants.....         | 1914  | 112                  | 49.0                              | 50                                                         | 35                   | 15              | .....           | .....           | .264                            | 1                                                   | 9                    | 51                   | 39                   | .....                | 12.79                              |
|                                               | 1915  | 96                   | 50.0                              | 42                                                         | 45                   | 8               | 5               | .....           | .246                            | 7                                                   | 7                    | 50                   | 35                   | .....                | 12.09                              |
| Heaters' helpers:<br>8 plants.....            | 1914  | 48                   | 52.3                              | 50                                                         | 29                   | .....           | 13              | 8               | .311                            | 4                                                   | 10                   | 42                   | 35                   | 8                    | 15.63                              |
|                                               | 1915  | 52                   | 52.3                              | 46                                                         | 35                   | .....           | 12              | 8               | .308                            | 4                                                   | 12                   | 40                   | 35                   | 10                   | 15.53                              |
| Hook-ups:<br>27 plants.....                   | 1914  | 97                   | 54.4                              | 19                                                         | 45                   | 14              | 22              | .....           | .251                            | 17                                                  | 20                   | 41                   | 15                   | 7                    | 13.58                              |
|                                               | 1915  | 94                   | 53.8                              | 19                                                         | 48                   | 13              | 20              | .....           | .233                            | 24                                                  | 19                   | 30                   | 22                   | 4                    | 12.40                              |
| Hotbed men:<br>26 plants.....                 | 1914  | 117                  | 54.2                              | 21                                                         | 42                   | 17              | 19              | .....           | .245                            | 5                                                   | 23                   | 54                   | 15                   | 3                    | 13.10                              |
|                                               | 1915  | 112                  | 54.2                              | 22                                                         | 38                   | 16              | 25              | .....           | .243                            | 13                                                  | 10                   | 55                   | 19                   | 4                    | 12.98                              |
| Puddlers' helpers:<br>15 plants.....          | 1914  | 475                  | 55.2                              | 2                                                          | 64                   | 35              | .....           | .....           | .241                            | 2                                                   | 14                   | 79                   | 6                    | .....                | 13.25                              |
|                                               | 1915  | 456                  | 52.8                              | 2                                                          | 70                   | 29              | .....           | .....           | .224                            | 2                                                   | 21                   | 66                   | 11                   | .....                | 11.78                              |
| Puddlers, three-handed:<br>6 plants.....      | 1914  | 255                  | 47.1                              | 58                                                         | 42                   | .....           | .....           | .....           | .299                            | .....                                               | .....                | 49                   | 48                   | 2                    | 14.03                              |
|                                               | 1915  | 285                  | 46.8                              | 68                                                         | 32                   | .....           | .....           | .....           | .302                            | .....                                               | .....                | 71                   | 27                   | 2                    | 14.09                              |
| Roll engineers:<br>23 plants.....             | 1914  | 47                   | 66.9                              | .....                                                      | 4                    | 4               | 56              | 36              | .239                            | 4                                                   | 23                   | 55                   | 17                   | .....                | 15.92                              |
|                                               | 1915  | 45                   | 66.9                              | .....                                                      | 4                    | 4               | 51              | 40              | .242                            | 4                                                   | 20                   | 58                   | 18                   | .....                | 16.14                              |
| Roll hands, other:<br>8 plants.....           | 1914  | 17                   | 51.9                              | 18                                                         | 59                   | 24              | .....           | .....           | .286                            | .....                                               | 12                   | 53                   | 35                   | .....                | 14.75                              |
|                                               | 1915  | 14                   | 53.6                              | 21                                                         | 36                   | 29              | 14              | .....           | .295                            | 14                                                  | .....                | 50                   | 14                   | 21                   | 15.86                              |
| Shearmen:<br>19 plants.....                   | 1914  | 43                   | 57.3                              | .....                                                      | 47                   | 14              | 40              | .....           | .239                            | 19                                                  | 16                   | 42                   | 21                   | 2                    | 13.76                              |
|                                               | 1915  | 39                   | 57.8                              | .....                                                      | 41                   | 15              | 44              | .....           | .247                            | 15                                                  | 13                   | 46                   | 23                   | 3                    | 14.40                              |
| Shearmen's helpers:<br>20 plants.....         | 1914  | 110                  | 58.0                              | .....                                                      | 47                   | 13              | 40              | .....           | .192                            | 25                                                  | 14                   | 62                   | .....                | .....                | 11.23                              |
|                                               | 1915  | 109                  | 58.1                              | .....                                                      | 46                   | 12              | 42              | .....           | .196                            | 30                                                  | 8                    | 58                   | 4                    | .....                | 11.50                              |
| Stockers:<br>28 plants.....                   | 1914  | 300                  | 57.6                              | 12                                                         | 39                   | 6               | 41              | 1               | .205                            | 7                                                   | 24                   | 68                   | 1                    | .....                | 11.78                              |
|                                               | 1915  | 304                  | 58.1                              | 10                                                         | 37                   | 6               | 46              | 1               | .204                            | 12                                                  | 19                   | 66                   | 2                    | .....                | 11.85                              |
| Unclassified—productive:<br>27 plants.....    | 1914  | 354                  | 56.8                              | 18                                                         | 36                   | 5               | 33              | 9               | .223                            | 14                                                  | 31                   | 42                   | 8                    | 6                    | 12.32                              |
|                                               | 1915  | 328                  | 55.0                              | 25                                                         | 34                   | 4               | 27              | 10              | .242                            | 18                                                  | 28                   | 36                   | 9                    | 9                    | 12.78                              |
| Unclassified—nonproductive:<br>21 plants..... | 1914  | 147                  | 65.1                              | 4                                                          | 16                   | 1               | 48              | 1 30            | .226                            | 8                                                   | 32                   | 52                   | 5                    | 2                    | 14.47                              |
|                                               | 1915  | 146                  | 62.9                              | 5                                                          | 25                   | 3               | 43              | 2 25            | .225                            | 10                                                  | 29                   | 56                   | 3                    | 2                    | 13.80                              |

<sup>1</sup> Includes 7 per cent working 34 hours.

<sup>2</sup> Includes 8 per cent working 34 hours.

# 184 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

TABLE 22.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1914 AND 1915—*PUDDLING MILLS*—Concluded.

| Occupation, and number of plants.       | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |                 |                 |                 | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                      | Average full-time weekly earnings. |
|-----------------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|----------------------|-----------------|-----------------|-----------------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|----------------------|------------------------------------|
|                                         |       |                      |                                   | 48 and under.                                              | Over 48 and under 56 | 56 and under 60 | 60 and under 72 | 72 and under 84 |                                 | Under 30 cts.                                       | 30 and under 40 cts. | 40 and under 50 cts. | 50 and under 60 cts. | 60 cts. and over.    |                                    |
| Bushelers:                              |       |                      |                                   |                                                            |                      |                 |                 |                 |                                 |                                                     |                      |                      |                      |                      |                                    |
| 4 plants.....                           | 1914  | 18                   | 50.4                              | 33                                                         | 44                   | 22              |                 |                 | \$0.462                         |                                                     | 28                   | 33                   | 33                   | 6                    | \$23.14                            |
|                                         | 1915  | 19                   | 53.6                              | 16                                                         | 42                   | 42              |                 |                 | .413                            | 37                                                  | 16                   | 21                   | 11                   | 16                   | 22.03                              |
| Bushelers, level-handed:                |       |                      |                                   |                                                            |                      |                 |                 |                 |                                 |                                                     |                      |                      |                      |                      |                                    |
| 6 plants.....                           | 1914  | 98                   | 47.1                              | 53                                                         | 47                   |                 |                 |                 | .418                            | 29                                                  | 6                    | 50                   | 9                    | 6                    | 20.07                              |
|                                         | 1915  | 67                   | 45.7                              | 64                                                         | 36                   |                 |                 |                 | .419                            | 15                                                  | 25                   | 39                   | 3                    | 18                   | 19.37                              |
| Bushelers, level-handed (with helpers): |       |                      |                                   |                                                            |                      |                 |                 |                 |                                 |                                                     |                      |                      |                      |                      |                                    |
| 9 plants.....                           | 1914  | 274                  | 43.4                              | 81                                                         | 19                   |                 |                 |                 | .565                            |                                                     | 12                   | 17                   | 35                   | 36                   | 23.97                              |
|                                         | 1915  | 246                  | 44.9                              | 71                                                         | 29                   |                 |                 |                 | .523                            | 4                                                   | 10                   | 26                   | 35                   | 25                   | 23.16                              |
| Bushelers, three-handed:                |       |                      |                                   |                                                            |                      |                 |                 |                 |                                 |                                                     |                      |                      |                      |                      |                                    |
| 3 plants.....                           | 1914  | 54                   | 42.8                              | 100                                                        |                      |                 |                 |                 | .556                            |                                                     |                      | 28                   | 50                   | 22                   | 23.84                              |
|                                         | 1915  | 27                   | 43.0                              | 100                                                        |                      |                 |                 |                 | .627                            |                                                     |                      | 33                   |                      | 67                   | 26.92                              |
| Catchers:                               |       |                      |                                   |                                                            |                      |                 |                 |                 |                                 |                                                     |                      |                      |                      |                      |                                    |
| 27 plants.....                          | 1914  | 91                   | 53.4                              | 21                                                         | 54                   | 15              | 9               |                 | .362                            | 35                                                  | 35                   | 19                   | 2                    | 9                    | 18.99                              |
|                                         | 1915  | 88                   | 52.8                              | 22                                                         | 57                   | 11              | 11              |                 | .363                            | 28                                                  | 39                   | 20                   | 11                   | 1                    | 18.89                              |
| Puddlers:                               |       |                      |                                   |                                                            |                      |                 |                 |                 |                                 |                                                     |                      |                      |                      |                      |                                    |
| 13 plants.....                          | 1914  | 458                  | 54.8                              | 2                                                          | 80                   | 18              |                 |                 | .416                            | 1                                                   | 60                   | 29                   | 9                    | (1)                  | 22.76                              |
|                                         | 1915  | 422                  | 52.4                              | 2                                                          | 86                   | 12              |                 |                 | .390                            | 2                                                   | 72                   | 10                   | 15                   |                      | 20.45                              |
| Puddlers, level-handed:                 |       |                      |                                   |                                                            |                      |                 |                 |                 |                                 |                                                     |                      |                      |                      |                      |                                    |
| 17 plants.....                          | 1914  | 896                  | 49.3                              | 49                                                         | 37                   | 14              |                 |                 | .416                            | 9                                                   | 13                   | 75                   | 3                    | (1)                  | 20.37                              |
|                                         | 1915  | 924                  | 48.0                              | 65                                                         | 23                   | 13              |                 |                 | .392                            | 12                                                  | 28                   | 56                   | 4                    |                      | 18.60                              |
| Puddlers, level-handed (with helpers):  |       |                      |                                   |                                                            |                      |                 |                 |                 |                                 |                                                     |                      |                      |                      |                      |                                    |
| 2 plants.....                           | 1914  | 34                   | 54.3                              |                                                            | 47                   | 53              |                 |                 | .310                            | 35                                                  | 41                   | 24                   |                      |                      | 18.22                              |
|                                         | 1915  | 68                   | 52.5                              |                                                            | 65                   | 35              |                 |                 | .324                            | 6                                                   | 94                   |                      |                      |                      | 17.01                              |
| Roughers:                               |       |                      |                                   |                                                            |                      |                 |                 |                 |                                 |                                                     |                      |                      |                      |                      |                                    |
| 20 plants.....                          | 1914  | 71                   | 51.9                              | 39                                                         | 38                   | 6               | 17              |                 | .436                            | 15                                                  | 35                   | 25                   | 3                    | 21                   | 22.17                              |
|                                         | 1915  | 69                   | 51.8                              | 41                                                         | 39                   | 6               | 15              |                 | .426                            | 12                                                  | 35                   | 25                   | 20                   | 9                    | 21.69                              |
|                                         |       |                      |                                   |                                                            |                      |                 |                 |                 |                                 |                                                     | Under 40 cts.        | 40 and under 50 cts. | 50 and under 60 cts. | 60 and under 70 cts. | 70 cts. and over.                  |
| Heaters:                                |       |                      |                                   |                                                            |                      |                 |                 |                 |                                 |                                                     |                      |                      |                      |                      |                                    |
| 9 plants.....                           | 1914  | 25                   | 51.0                              | 48                                                         | 40                   | 4               | 8               |                 | .709                            |                                                     | 12                   | 16                   | 24                   | 48                   | 35.28                              |
|                                         | 1915  | 27                   | 50.9                              | 44                                                         | 44                   | 4               | 7               |                 | .730                            |                                                     | 7                    | 22                   | 11                   | 59                   | 36.37                              |
| Rollers:                                |       |                      |                                   |                                                            |                      |                 |                 |                 |                                 |                                                     |                      |                      |                      |                      |                                    |
| 24 plants.....                          | 1914  | 65                   | 53.1                              | 23                                                         | 50                   | 18              | 9               |                 | .573                            | 26                                                  | 30                   | 14                   | 8                    | 23                   | 29.38                              |
|                                         | 1915  | 64                   | 52.4                              | 25                                                         | 47                   | 16              | 12              |                 | .583                            | 27                                                  | 33                   | 9                    |                      | 31                   | 29.89                              |

<sup>1</sup> Less than one-half of 1 per cent.

Twenty-four plants employed 322 laborers (the first occupation presented in the table above) in 1914 and 303 in 1915. The average full-time hours per week were reduced two hours, from 59.5 in 1914 to 57.5 in 1915; in 1915 35 per cent of the 303 employees worked over 48 and under 56 hours per week, 14 per cent 56 and under 60, and 51 per cent 60 and under 72 hours. The average rate of wages per hour decreased from 17.3 cents in 1914 to 16.7 cents in 1915; 3 per cent of the 303 employees in 1915 earned 12 and under 14 cents per hour, 36 per cent 14 and under 16 cents, 38 per cent 16 and under 18 cents, 6 per cent 18 and under 20 cents, and 17 per cent 20 and under 25 cents. The average full-time weekly earnings decreased

from \$10.35 in 1914 to \$9.66 in 1915. The full-time weekly earnings in 1915 of 1 occupation were \$9.66, of 14 occupations from \$10.62 to \$16.14, of 9 other occupations from \$17.01 to \$26.92, and those of rollers \$29.89, and of heaters \$36.37.

## INDEX NUMBERS.

To aid in making a comparison of the earnings and hours in the two years, relative or index numbers have been computed from the averages given in Table 22 and these are printed in Table 23. The figures for 1915 are taken as the base, or 100 per cent, and the relative for 1914 is the per cent that the average for 1914 is of the average for 1915. For example, the relative full-time weekly earnings of stockers in 1914 were 99 as compared with 100 in 1915—that is, the full-time weekly earnings in 1914 were 99 per cent of the full-time weekly earnings in 1915.

Table 23 also shows for each occupation and for all occupations combined the per cent of increase or decrease in hours, rates of wages, and weekly earnings in 1915 as compared with 1914, computed from the relative numbers. For example, weekly earnings of puddlers decreased 10 per cent in 1915 as compared with 1914. The actual difference between the relative numbers is 11, which divided by 111, the relative for 1914, gives 10 (9.9), the per cent of the decrease.

TABLE 23.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1914 AND 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN 1915, BY OCCUPATIONS—PUDDLING MILLS.

| Occupation and year.                    | Hours per week.                    |                                                                         | Wages per hour.                  |                                                                         | Weekly earnings.                    |                                                                         |
|-----------------------------------------|------------------------------------|-------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------------------------|-------------------------------------|-------------------------------------------------------------------------|
|                                         | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in 1915 as compared with 1914. | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in 1915 as compared with 1914. | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in 1915 as compared with 1914. |
| Stockers:                               |                                    |                                                                         |                                  |                                                                         |                                     |                                                                         |
| 1914.....                               | 99                                 | +1                                                                      | 101                              | — 1                                                                     | 99                                  | + 1                                                                     |
| 1915.....                               | 100                                |                                                                         | 100                              |                                                                         | 100                                 |                                                                         |
| Puddlers:                               |                                    |                                                                         |                                  |                                                                         |                                     |                                                                         |
| 1914.....                               | 105                                | —5                                                                      | 107                              | — 7                                                                     | 111                                 | —10                                                                     |
| 1915.....                               | 100                                |                                                                         | 100                              |                                                                         | 100                                 |                                                                         |
| Puddlers, level-handed:                 |                                    |                                                                         |                                  |                                                                         |                                     |                                                                         |
| 1914.....                               | 103                                | —3                                                                      | 106                              | — 6                                                                     | 110                                 | — 9                                                                     |
| 1915.....                               | 100                                |                                                                         | 100                              |                                                                         | 100                                 |                                                                         |
| Puddlers, level-handed (with helpers):  |                                    |                                                                         |                                  |                                                                         |                                     |                                                                         |
| 1914.....                               | 103                                | —3                                                                      | 105                              | — 5                                                                     | 107                                 | — 7                                                                     |
| 1915.....                               | 100                                |                                                                         | 100                              |                                                                         | 100                                 |                                                                         |
| Puddlers, three-handed:                 |                                    |                                                                         |                                  |                                                                         |                                     |                                                                         |
| 1914.....                               | 101                                | —1                                                                      | 99                               | + 1                                                                     | 100                                 | ( <sup>1</sup> )                                                        |
| 1915.....                               | 100                                |                                                                         | 100                              |                                                                         | 100                                 |                                                                         |
| Puddlers' helpers:                      |                                    |                                                                         |                                  |                                                                         |                                     |                                                                         |
| 1914.....                               | 105                                | —5                                                                      | 108                              | — 7                                                                     | 113                                 | —12                                                                     |
| 1915.....                               | 100                                |                                                                         | 100                              |                                                                         | 100                                 |                                                                         |
| Bushelers:                              |                                    |                                                                         |                                  |                                                                         |                                     |                                                                         |
| 1914.....                               | 94                                 | +6                                                                      | 112                              | —11                                                                     | 105                                 | — 5                                                                     |
| 1915.....                               | 100                                |                                                                         | 100                              |                                                                         | 100                                 |                                                                         |
| Bushelers, level-handed:                |                                    |                                                                         |                                  |                                                                         |                                     |                                                                         |
| 1914.....                               | 103                                | —3                                                                      | 100                              | ( <sup>1</sup> )                                                        | 104                                 | — 4                                                                     |
| 1915.....                               | 100                                |                                                                         | 100                              |                                                                         | 100                                 |                                                                         |
| Bushelers, level-handed (with helpers): |                                    |                                                                         |                                  |                                                                         |                                     |                                                                         |
| 1914.....                               | 97                                 | +3                                                                      | 108                              | — 7                                                                     | 104                                 | — 4                                                                     |
| 1915.....                               | 100                                |                                                                         | 100                              |                                                                         | 100                                 |                                                                         |

<sup>1</sup> No change.

# 186 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

TABLE 23.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1914 AND 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN 1915, BY OCCUPATIONS—*PUDDLING MILLS*—Concluded.

| Occupation and year.        | Hours per week.                    |                                                                         | Wages per hour.                  |                                                                         | Weekly earnings.                    |                                                                         |
|-----------------------------|------------------------------------|-------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------------------------|-------------------------------------|-------------------------------------------------------------------------|
|                             | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in 1915 as compared with 1914. | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in 1915 as compared with 1914. | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in 1915 as compared with 1914. |
| Bushelers, three-handed:    |                                    |                                                                         |                                  |                                                                         |                                     |                                                                         |
| 1914.....                   | 100                                | ( <sup>1</sup> )                                                        | 89                               | +12                                                                     | 89                                  | +12                                                                     |
| 1915.....                   | 100                                |                                                                         | 100                              |                                                                         | 100                                 |                                                                         |
| Bushelers' helpers:         |                                    |                                                                         |                                  |                                                                         |                                     |                                                                         |
| 1914.....                   | 98                                 | +2                                                                      | 107                              | — 7                                                                     | 106                                 | — 6                                                                     |
| 1915.....                   | 100                                |                                                                         | 100                              |                                                                         | 100                                 |                                                                         |
| Heaters:                    |                                    |                                                                         |                                  |                                                                         |                                     |                                                                         |
| 1914.....                   | 100                                | ( <sup>1</sup> )                                                        | 97                               | + 3                                                                     | 97                                  | + 3                                                                     |
| 1915.....                   | 100                                |                                                                         | 100                              |                                                                         | 100                                 |                                                                         |
| Heaters' helpers:           |                                    |                                                                         |                                  |                                                                         |                                     |                                                                         |
| 1914.....                   | 100                                | ( <sup>1</sup> )                                                        | 101                              | — 1                                                                     | 101                                 | — 1                                                                     |
| 1915.....                   | 100                                |                                                                         | 100                              |                                                                         | 100                                 |                                                                         |
| Bloom boys:                 |                                    |                                                                         |                                  |                                                                         |                                     |                                                                         |
| 1914.....                   | 101                                | —1                                                                      | 101                              | — 1                                                                     | 102                                 | — 2                                                                     |
| 1915.....                   | 100                                |                                                                         | 100                              |                                                                         | 100                                 |                                                                         |
| Roll engineers:             |                                    |                                                                         |                                  |                                                                         |                                     |                                                                         |
| 1914.....                   | 100                                | ( <sup>1</sup> )                                                        | 99                               | + 1                                                                     | 99                                  | + 1                                                                     |
| 1915.....                   | 100                                |                                                                         | 100                              |                                                                         | 100                                 |                                                                         |
| Rollers:                    |                                    |                                                                         |                                  |                                                                         |                                     |                                                                         |
| 1914.....                   | 101                                | —1                                                                      | 98                               | + 2                                                                     | 98                                  | + 2                                                                     |
| 1915.....                   | 100                                |                                                                         | 100                              |                                                                         | 100                                 |                                                                         |
| Roughers:                   |                                    |                                                                         |                                  |                                                                         |                                     |                                                                         |
| 1914.....                   | 100                                | ( <sup>1</sup> )                                                        | 102                              | — 2                                                                     | 102                                 | — 2                                                                     |
| 1915.....                   | 100                                |                                                                         | 100                              |                                                                         | 100                                 |                                                                         |
| Catchers:                   |                                    |                                                                         |                                  |                                                                         |                                     |                                                                         |
| 1914.....                   | 101                                | —1                                                                      | 100                              | ( <sup>1</sup> )                                                        | 101                                 | — 1                                                                     |
| 1915.....                   | 100                                |                                                                         | 100                              |                                                                         | 100                                 |                                                                         |
| Hook-ups:                   |                                    |                                                                         |                                  |                                                                         |                                     |                                                                         |
| 1914.....                   | 101                                | —1                                                                      | 108                              | — 7                                                                     | 110                                 | — 9                                                                     |
| 1915.....                   | 100                                |                                                                         | 100                              |                                                                         | 100                                 |                                                                         |
| Roll hands, other:          |                                    |                                                                         |                                  |                                                                         |                                     |                                                                         |
| 1914.....                   | 97                                 | +3                                                                      | 97                               | + 3                                                                     | 93                                  | + 8                                                                     |
| 1915.....                   | 100                                |                                                                         | 100                              |                                                                         | 100                                 |                                                                         |
| Hotbed men:                 |                                    |                                                                         |                                  |                                                                         |                                     |                                                                         |
| 1914.....                   | 100                                | ( <sup>1</sup> )                                                        | 101                              | — 1                                                                     | 101                                 | — 1                                                                     |
| 1915.....                   | 100                                |                                                                         | 100                              |                                                                         | 100                                 |                                                                         |
| Shearmen:                   |                                    |                                                                         |                                  |                                                                         |                                     |                                                                         |
| 1914.....                   | 99                                 | +1                                                                      | 97                               | + 3                                                                     | 95                                  | + 5                                                                     |
| 1915.....                   | 100                                |                                                                         | 100                              |                                                                         | 100                                 |                                                                         |
| Shearmen's helpers:         |                                    |                                                                         |                                  |                                                                         |                                     |                                                                         |
| 1914.....                   | 100                                | ( <sup>1</sup> )                                                        | 98                               | + 2                                                                     | 98                                  | + 2                                                                     |
| 1915.....                   | 100                                |                                                                         | 100                              |                                                                         | 100                                 |                                                                         |
| Laborers:                   |                                    |                                                                         |                                  |                                                                         |                                     |                                                                         |
| 1914.....                   | 104                                | —4                                                                      | 104                              | — 4                                                                     | 107                                 | — 7                                                                     |
| 1915.....                   | 100                                |                                                                         | 100                              |                                                                         | 100                                 |                                                                         |
| Unclassified—productive:    |                                    |                                                                         |                                  |                                                                         |                                     |                                                                         |
| 1914.....                   | 103                                | —3                                                                      | 92                               | + 9                                                                     | 96                                  | + 4                                                                     |
| 1915.....                   | 100                                |                                                                         | 100                              |                                                                         | 100                                 |                                                                         |
| Unclassified—nonproductive: |                                    |                                                                         |                                  |                                                                         |                                     |                                                                         |
| 1914.....                   | 104                                | —4                                                                      | 100                              | ( <sup>1</sup> )                                                        | 105                                 | — 5                                                                     |
| 1915.....                   | 100                                |                                                                         | 100                              |                                                                         | 100                                 |                                                                         |
| All occupations:            |                                    |                                                                         |                                  |                                                                         |                                     |                                                                         |
| 1914.....                   | 102                                | —2                                                                      | 104                              | — 4                                                                     | 105                                 | — 5                                                                     |
| 1915.....                   | 100                                |                                                                         | 100                              |                                                                         | 100                                 |                                                                         |

<sup>1</sup> No change.

## FULL-TIME WORKING DAYS PER WEEK.

The number and per cent of employees in puddling mills whose customary working time per week was 5 days or turns, or 6 days, or 7 days, or variations thereof, are shown in Table 24.

In 1915 24 per cent worked 5 turns per week; 50 per cent worked 6 days one week and 5 nights the next; 11 per cent were employed in three shifts in 24 hours, two working 5 days each only (Monday to

Friday) while the third worked a turn on Saturday, making 6 for the week; 13 per cent worked 6 days per week; 1 per cent 6 and 7 turns alternately; and 1 per cent 7 days per week.

TABLE 24.—NUMBER AND PER CENT OF EMPLOYEES IN EACH DISTRICT WORKING EACH SPECIFIED NUMBER OF DAYS PER WEEK, BY YEARS, 1914 AND 1915—*PUDDLING MILLS*.

[The figures for each year are for identical plants.]

| District, and number of plants. | Year. | Number of employees. | Number of employees whose customary working time per week was— |                                |                                         |         |                                |         | Per cent of employees whose customary working time per week was— |                                |                                         |         |                                |         |
|---------------------------------|-------|----------------------|----------------------------------------------------------------|--------------------------------|-----------------------------------------|---------|--------------------------------|---------|------------------------------------------------------------------|--------------------------------|-----------------------------------------|---------|--------------------------------|---------|
|                                 |       |                      | 5 days.                                                        | 5 days and 6 days alternately. | 5 days, 5 days, and 6 days in rotation. | 6 days. | 6 days and 7 days alternately. | 7 days. | 5 days.                                                          | 5 days and 6 days alternately. | 5 days, 5 days, and 6 days in rotation. | 6 days. | 6 days and 7 days alternately. | 7 days. |
| Eastern:<br>9 plants...         | 1914  | 1,656                | 1 388                                                          | 987                            | .....                                   | 239     | 16                             | 26      | 23                                                               | 60                             | .....                                   | 14      | 1                              | 2       |
|                                 | 1915  | 1,506                | <sup>2</sup> 882                                               | 402                            | .....                                   | 200     | 16                             | 6       | 59                                                               | 27                             | .....                                   | 13      | 1                              | (s)     |
| Pittsburgh:<br>7 plants...      | 1914  | 1,580                | 7                                                              | 1,342                          | 36                                      | 174     | 4                              | 17      | (s)                                                              | 85                             | 2                                       | 11      | (s)                            | 1       |
|                                 | 1915  | 1,640                | 5                                                              | 1,265                          | 204                                     | 147     | 2                              | 17      | (s)                                                              | 77                             | 12                                      | 9       | (s)                            | 1       |
| G. L. & M. W.:<br>8 plants...   | 1914  | 913                  | .....                                                          | 446                            | 329                                     | 132     | 6                              | .....   | .....                                                            | 49                             | 36                                      | 14      | 1                              | .....   |
|                                 | 1915  | 850                  | .....                                                          | 453                            | 293                                     | 98      | 6                              | .....   | .....                                                            | 53                             | 34                                      | 12      | 1                              | .....   |
| Southern:<br>5 plants...        | 1914  | 457                  | 205                                                            | 114                            | .....                                   | 136     | .....                          | 2       | 45                                                               | 25                             | .....                                   | 30      | .....                          | (s)     |
|                                 | 1915  | 476                  | 206                                                            | 118                            | .....                                   | 150     | .....                          | 2       | 43                                                               | 25                             | .....                                   | 32      | .....                          | (s)     |
| Total:<br>29 plants..           | 1914  | 4,606                | <sup>1</sup> 600                                               | 2,889                          | 365                                     | 681     | 26                             | 45      | 13                                                               | 63                             | 8                                       | 15      | 1                              | 1       |
|                                 | 1915  | 4,472                | <sup>2</sup> 1,093                                             | 2,238                          | 497                                     | 595     | 24                             | 25      | 24                                                               | 50                             | 11                                      | 13      | 1                              | 1       |

<sup>1</sup> Including 247 employees who worked 5 days and 6 days alternately for 5 months of the year.

<sup>2</sup> Including 216 employees who worked 5 days and 6 days alternately for 5 months of the year.

<sup>3</sup> Less than one-half of 1 per cent.

Two general tables also are presented for this department:

Table G.—Full-time hours per week, rates of wages per hour, and full-time weekly earnings, in the United States, by years, 1914 and 1915.

Table H.—Full-time hours per week, rates of wages per hour, and full-time weekly earnings, in each district, by years, 1914 and 1915.

The facts from Table G are summarized in Table 22, percentages being used instead of the actual figures for classified hours and rates of wages.

The order in which the occupations are given in Tables G and H and the table of relative numbers follows that of the processes of manufacture. "Identical plants," as used in the tables of this report, are identical units of identical establishments reporting the same occupations in each of two or more consecutive years. For a more extended explanation see page 58.

Descriptions of the occupations which appear in the tables of this chapter and of other occupations of the puddling department included in the two groups designated as "Unclassified—productive," and "Unclassified—nonproductive," are to be found in the Glossary of Occupations, pages 484 to 486.

TABLE G.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER  
BY YEARS, 1914 AND 1915—

[The figures for each group of

| Line No. | Occupation, and number of plants.        | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                          |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Stockers:                                | 1914  | 300                  | 57.6                              | \$0.205                         | \$11.78                            | 37                                             | 118                  | 18              | 32 | 91                   | 4  |                      |    |
| 2        | 28 plants.....                           | 1915  | 304                  | 58.1                              | .204                            | 11.85                              | 30                                             | 112                  | 17              | 37 | 104                  | 4  |                      |    |
| 3        | Puddlers:                                | 1914  | 458                  | 54.8                              | .416                            | 22.76                              | 9                                              | 365                  | 84              |    |                      |    |                      |    |
| 4        | 13 plants.....                           | 1915  | 422                  | 52.4                              | .390                            | 20.45                              | 7                                              | 364                  | 51              |    |                      |    |                      |    |
| 5        | Puddlers, level-handled:                 | 1914  | 895                  | 49.3                              | .416                            | 20.37                              | 442                                            | 332                  | 122             |    |                      |    |                      |    |
| 6        | 17 plants.....                           | 1915  | 924                  | 48.0                              | .392                            | 18.60                              | 596                                            | 208                  | 120             |    |                      |    |                      |    |
| 7        | Puddlers, level-handled (with helpers):  | 1914  | 34                   | 54.3                              | .340                            | 18.22                              |                                                | 16                   | 18              |    |                      |    |                      |    |
| 8        | 2 plants.....                            | 1915  | 68                   | 52.5                              | .324                            | 17.01                              |                                                | 44                   | 24              |    |                      |    |                      |    |
| 9        | Puddlers, three-handled:                 | 1914  | 255                  | 47.1                              | .299                            | 14.03                              | 147                                            | 108                  |                 |    |                      |    |                      |    |
| 10       | 6 plants.....                            | 1915  | 285                  | 46.8                              | .302                            | 14.09                              | 195                                            | 90                   |                 |    |                      |    |                      |    |
| 11       | Puddlers' helpers:                       | 1914  | 475                  | 55.2                              | .241                            | 13.25                              | 9                                              | 302                  | 164             |    |                      |    |                      |    |
| 12       | 15 plants.....                           | 1915  | 456                  | 52.8                              | .224                            | 11.78                              | 7                                              | 318                  | 131             |    |                      |    |                      |    |
| 13       | Bushelers:                               | 1914  | 18                   | 50.4                              | .462                            | 23.14                              | 6                                              | 8                    | 4               |    |                      |    |                      |    |
| 14       | 4 plants.....                            | 1915  | 19                   | 53.6                              | .413                            | 22.03                              | 3                                              | 8                    | 8               |    |                      |    |                      |    |
| 15       | Bushelers, level-handled:                | 1914  | 98                   | 47.1                              | .418                            | 20.07                              | 52                                             | 46                   |                 |    |                      |    |                      |    |
| 16       | 6 plants.....                            | 1915  | 67                   | 45.7                              | .419                            | 19.37                              | 43                                             | 24                   |                 |    |                      |    |                      |    |
| 17       | Bushelers, level-handled (with helpers): | 1914  | 274                  | 43.4                              | .565                            | 23.97                              | 222                                            | 52                   |                 |    |                      |    |                      |    |
| 18       | 9 plants.....                            | 1915  | 246                  | 44.9                              | .523                            | 23.16                              | 174                                            | 72                   |                 |    |                      |    |                      |    |
| 19       | Bushelers, three-handled:                | 1914  | 54                   | 42.8                              | .556                            | 23.84                              | 54                                             |                      |                 |    |                      |    |                      |    |
| 20       | 3 plants.....                            | 1915  | 27                   | 43.0                              | .627                            | 26.92                              | 27                                             |                      |                 |    |                      |    |                      |    |
| 21       | Bushelers' helpers:                      | 1914  | 112                  | 49.0                              | .264                            | 12.79                              | 56                                             | 39                   | 17              |    |                      |    |                      |    |
| 22       | 12 plants.....                           | 1915  | 96                   | 50.0                              | .246                            | 12.09                              | 40                                             | 43                   | 8               |    | 5                    |    |                      |    |
| 23       | Heaters:                                 | 1914  | 25                   | 51.0                              | .709                            | 35.28                              | 12                                             | 10                   | 1               |    | 2                    |    |                      |    |
| 24       | 9 plants.....                            | 1915  | 27                   | 50.9                              | .730                            | 36.37                              | 12                                             | 12                   | 1               |    | 2                    |    |                      |    |
| 25       | Heaters' helpers:                        | 1914  | 48                   | 52.3                              | .311                            | 15.63                              | 24                                             | 14                   |                 |    | 6                    | 4  |                      |    |
| 26       | 8 plants.....                            | 1915  | 52                   | 52.3                              | .308                            | 15.53                              | 24                                             | 18                   |                 |    | 6                    | 4  |                      |    |
| 27       | Bloom boys:                              | 1914  | 77                   | 54.3                              | .201                            | 10.79                              | 12                                             | 41                   | 15              | 4  | 5                    |    |                      |    |
| 28       | 25 plants.....                           | 1915  | 68                   | 53.9                              | .199                            | 10.62                              | 12                                             | 33                   | 13              | 2  | 8                    |    |                      |    |
| 29       | Roll engineers:                          | 1914  | 47                   | 66.9                              | .239                            | 15.92                              |                                                | 2                    | 2               | 5  | 21                   | 15 | 2                    |    |
| 30       | 23 plants.....                           | 1915  | 45                   | 66.9                              | .242                            | 16.14                              |                                                | 2                    | 2               | 5  | 18                   | 16 | 2                    |    |
| 31       | Rollers:                                 | 1914  | 66                   | 53.1                              | .573                            | 29.38                              | 15                                             | 33                   | 12              | 2  | 4                    |    |                      |    |
| 32       | 24 plants.....                           | 1915  | 64                   | 52.4                              | .583                            | 29.89                              | 16                                             | 30                   | 10              | 2  | 6                    |    |                      |    |
| 33       | Roughers:                                | 1914  | 71                   | 51.9                              | .436                            | 22.17                              | 28                                             | 27                   | 4               | 2  | 10                   |    |                      |    |
| 34       | 20 plants.....                           | 1915  | 69                   | 51.8                              | .426                            | 21.69                              | 28                                             | 27                   | 4               | 2  | 8                    |    |                      |    |
| 35       | Catchers:                                | 1914  | 91                   | 53.4                              | .362                            | 18.99                              | 19                                             | 49                   | 14              | 4  | 5                    |    |                      |    |
| 36       | 27 plants.....                           | 1915  | 88                   | 52.8                              | .363                            | 18.89                              | 19                                             | 50                   | 10              | 4  | 5                    |    |                      |    |
| 37       | Hook-ups:                                | 1914  | 97                   | 54.4                              | .251                            | 13.58                              | 18                                             | 44                   | 14              | 4  | 17                   |    |                      |    |
| 38       | 27 plants.....                           | 1915  | 94                   | 53.8                              | .233                            | 12.40                              | 18                                             | 45                   | 12              | 4  | 15                   |    |                      |    |
| 39       | Roll hands, other:                       | 1914  | 17                   | 51.9                              | .286                            | 14.75                              | 3                                              | 10                   | 4               |    |                      |    |                      |    |
| 40       | 8 plants.....                            | 1915  | 14                   | 53.6                              | .295                            | 15.86                              | 3                                              | 5                    | 4               |    | 2                    |    |                      |    |
| 41       | Hotbed men:                              | 1914  | 117                  | 54.2                              | .245                            | 13.10                              | 25                                             | 49                   | 20              | 4  | 19                   |    |                      |    |
| 42       | 26 plants.....                           | 1915  | 112                  | 54.2                              | .243                            | 12.98                              | 25                                             | 42                   | 18              | 4  | 23                   |    |                      |    |



# HOUR, AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, *PUDDLING MILLS.*

years are for identical plants.]

| Employees whose rates of wages per hour were— |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | Line No. |
|-----------------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|--------------------|----------|
| 8 and under 10 cts.                           | 10 and under 12 cts. | 12 and under 14 cts. | 14 and under 16 cts. | 16 and under 18 cts. | 18 and under 20 cts. | 20 and under 25 cts. | 25 and under 30 cts. | 30 and under 35 cts. | 35 and under 40 cts. | 40 and under 45 cts. | 45 and under 50 cts. | 50 and under 55 cts. | 55 and under 60 cts. | 60 and under 65 cts. | 65 and under 70 cts. | 70 cents and over. |          |
| .....                                         | 2                    | 3                    | 17                   | 35                   | 36                   | 177                  | 27                   | 3                    | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....              | 1        |
| .....                                         | 2                    | 5                    | 30                   | 30                   | 28                   | 179                  | 23                   | 7                    | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....              | 2        |
| .....                                         | .....                | .....                | .....                | .....                | .....                | 1                    | 4                    | 17                   | 260                  | 47                   | 85                   | 35                   | 7                    | 2                    | .....                | .....              | 3        |
| .....                                         | .....                | .....                | .....                | .....                | .....                | 2                    | 8                    | 82                   | 223                  | 5                    | 38                   | 56                   | 8                    | .....                | .....                | .....              | 4        |
| .....                                         | .....                | .....                | .....                | .....                | 6                    | 28                   | 48                   | 20                   | 93                   | 480                  | 189                  | 28                   | 2                    | 2                    | .....                | .....              | 5        |
| .....                                         | .....                | .....                | .....                | 20                   | 8                    | 37                   | 49                   | 50                   | 211                  | 447                  | 66                   | 30                   | 6                    | .....                | .....                | .....              | 6        |
| .....                                         | .....                | .....                | .....                | .....                | .....                | .....                | 12                   | 8                    | 6                    | 8                    | .....                | .....                | .....                | .....                | .....                | .....              | 7        |
| .....                                         | .....                | .....                | .....                | .....                | .....                | .....                | 4                    | 60                   | 4                    | .....                | .....                | .....                | .....                | .....                | .....                | .....              | 8        |
| .....                                         | .....                | .....                | .....                | .....                | .....                | .....                | .....                | 126                  | 105                  | 18                   | 6                    | .....                | .....                | .....                | .....                | .....              | 9        |
| .....                                         | .....                | .....                | .....                | .....                | .....                | 3                    | 198                  | 57                   | 21                   | 6                    | .....                | .....                | .....                | .....                | .....                | .....              | 10       |
| .....                                         | .....                | 3                    | 5                    | 5                    | 60                   | 278                  | 96                   | 26                   | 2                    | .....                | .....                | .....                | .....                | .....                | .....                | .....              | 11       |
| .....                                         | 2                    | .....                | 5                    | 59                   | 36                   | 284                  | 18                   | 52                   | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....              | 12       |
| .....                                         | .....                | .....                | .....                | .....                | .....                | .....                | .....                | 3                    | 2                    | 3                    | 3                    | 3                    | 3                    | 1                    | .....                | .....              | 13       |
| .....                                         | .....                | .....                | .....                | .....                | .....                | 2                    | 5                    | 2                    | 1                    | 1                    | 3                    | 2                    | .....                | .....                | 3                    | .....              | 14       |
| .....                                         | .....                | .....                | .....                | .....                | .....                | .....                | 13                   | 15                   | 2                    | 4                    | 35                   | 7                    | 2                    | .....                | 2                    | 4                  | 15       |
| .....                                         | .....                | .....                | .....                | .....                | .....                | .....                | 10                   | 11                   | 6                    | 26                   | 14                   | 2                    | .....                | 4                    | 4                    | .....              | 16       |
| .....                                         | .....                | .....                | .....                | .....                | .....                | .....                | .....                | 6                    | 26                   | 14                   | 33                   | 51                   | 46                   | 35                   | 15                   | 48                 | 17       |
| .....                                         | .....                | .....                | .....                | .....                | .....                | 4                    | 6                    | 7                    | 17                   | 24                   | 40                   | 60                   | 26                   | 17                   | 24                   | 21                 | 18       |
| .....                                         | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | 3                    | 12                   | 18                   | 9                    | 3                    | 3                    | 6                  | 19       |
| .....                                         | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | 9                    | .....                | .....                | 3                    | 6                    | 9                  | 20       |
| .....                                         | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....              | 21       |
| .....                                         | 1                    | 4                    | .....                | 1                    | 9                    | 1                    | 27                   | 30                   | 44                   | .....                | .....                | .....                | .....                | .....                | .....                | .....              | 22       |
| .....                                         | .....                | .....                | .....                | 2                    | 7                    | 40                   | 8                    | 34                   | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....              | 23       |
| .....                                         | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | 2                    | 1                    | 1                    | 3                    | 4                    | 2                    | 12                 | 24       |
| .....                                         | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | 1                    | .....                | .....                | .....                | .....                | .....                | 16                 | 25       |
| .....                                         | .....                | .....                | .....                | 2                    | 2                    | 3                    | 13                   | 7                    | 12                   | 5                    | .....                | .....                | .....                | .....                | .....                | .....              | 26       |
| .....                                         | .....                | .....                | .....                | 2                    | 3                    | 12                   | 9                    | 11                   | 7                    | 1                    | .....                | .....                | .....                | .....                | .....                | .....              | 27       |
| .....                                         | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....              | 28       |
| .....                                         | 1                    | 6                    | 19                   | 5                    | 9                    | 24                   | 4                    | 7                    | 2                    | .....                | .....                | .....                | .....                | .....                | .....                | .....              | 29       |
| 2                                             | 1                    | 5                    | 10                   | 5                    | 9                    | 23                   | 7                    | 6                    | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....              | 30       |
| .....                                         | .....                | 2                    | .....                | 2                    | 9                    | 14                   | 12                   | 8                    | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....              | 31       |
| .....                                         | .....                | .....                | 2                    | 7                    | 2                    | 12                   | 14                   | 8                    | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....              | 32       |
| .....                                         | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....              | 33       |
| .....                                         | .....                | .....                | .....                | .....                | .....                | .....                | .....                | 5                    | 4                    | 8                    | 12                   | 8                    | 1                    | 4                    | 1                    | 15                 | 34       |
| .....                                         | .....                | .....                | .....                | .....                | .....                | 1                    | 5                    | 3                    | 8                    | 11                   | 10                   | 4                    | 2                    | .....                | .....                | 20                 | 35       |
| .....                                         | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....              | 36       |
| .....                                         | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....              | 37       |
| .....                                         | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....              | 38       |
| .....                                         | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....              | 39       |
| .....                                         | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....              | 40       |
| .....                                         | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....              | 41       |
| .....                                         | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....                | .....              | 42       |

# 190 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

TABLE G.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER  
BY YEARS, 1914 AND 1915—

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |     |                      |       |                      |       |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-----|----------------------|-------|----------------------|-------|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60  | Over 60 and under 72 | 72    | Over 72 and under 84 | 84    |
| 1        | Shearmen:                         | 1914  | 43                   | 57.3                              | \$0.239                         | \$13.70                            | .....                                          | 20                   | 6               | 9   | 8                    | ..... | .....                | ..... |
| 2        | 19 plants.....                    | 1915  | 39                   | 57.8                              | .247                            | 14.40                              | .....                                          | 16                   | 6               | 7   | 10                   | ..... | .....                | ..... |
| 3        | Shearmen's helpers:               | 1914  | 110                  | 58.0                              | .192                            | 11.23                              | .....                                          | 52                   | 14              | 10  | 34                   | ..... | .....                | ..... |
| 4        | 20 plants.....                    | 1915  | 109                  | 58.1                              | .196                            | 11.50                              | .....                                          | 50                   | 13              | 10  | 36                   | ..... | .....                | ..... |
| 5        | Laborers:                         | 1914  | 322                  | 59.5                              | .173                            | 10.35                              | .....                                          | 59                   | 58              | 134 | 69                   | 2     | .....                | ..... |
| 6        | 24 plants.....                    | 1915  | 303                  | 57.5                              | .167                            | 9.66                               | .....                                          | 107                  | 42              | 107 | 47                   | ..... | .....                | ..... |
| 7        | Unclassified—productive:          | 1914  | 354                  | 56.8                              | .223                            | 12.32                              | 62                                             | 127                  | 19              | 41  | 74                   | 29    | 2                    | ..... |
| 8        | 27 plants.....                    | 1915  | 328                  | 55.0                              | .242                            | 12.78                              | 83                                             | 113                  | 13              | 34  | 55                   | 28    | 2                    | ..... |
| 9        | Unclassified—nonproductive:       | 1914  | 147                  | 65.1                              | .226                            | 14.47                              | 6                                              | 24                   | 2               | 38  | 33                   | 10    | 23                   | 11    |
| 10       | 21 plants.....                    | 1915  | 146                  | 62.9                              | .225                            | 13.80                              | 7                                              | 37                   | 4               | 32  | 31                   | 10    | 14                   | 11    |

HOURLY AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES;  
 PUDDLING MILLS—Concluded.

| Employees whose rates of wages per hour were— |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | Line<br>No. |
|-----------------------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|-----------------------------|-------------|
| 8<br>and<br>under<br>10<br>cts.               | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>35<br>cts. | 35<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>45<br>cts. | 45<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>55<br>cts. | 55<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>65<br>cts. | 65<br>and<br>under<br>70<br>cts. | 70<br>cents<br>and<br>over. |             |
|                                               |                                  | 4                                | 4                                | 3                                | 4                                | 5                                | 13                               | 9                                |                                  |                                  | 1                                |                                  |                                  |                                  |                                  |                             | 1           |
|                                               |                                  |                                  | 6                                | 5                                |                                  | 4                                | 14                               | 9                                |                                  |                                  | 1                                |                                  |                                  |                                  |                                  |                             | 2           |
|                                               |                                  | 12                               | 15                               | 11                               | 4                                | 60                               | 8                                |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 3           |
|                                               |                                  | 12                               | 21                               | 6                                | 3                                | 59                               | 4                                | 4                                |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 4           |
|                                               |                                  | 12                               | 30                               | 179                              | 28                               | 73                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 5           |
|                                               |                                  | 10                               | 109                              | 116                              | 17                               | 51                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 6           |
|                                               | 14                               | 17                               | 20                               | 60                               | 48                               | 128                              | 19                               | 15                               | 13                               | 9                                | 4                                | 1                                |                                  |                                  |                                  | 2                           | 7           |
|                                               | 5                                | 38                               | 15                               | 45                               | 47                               | 86                               | 33                               | 18                               | 11                               | 9                                | 3                                | 3                                | 4                                |                                  | 1                                | 4                           | 8           |
|                                               |                                  | 5                                | 7                                | 31                               | 16                               | 40                               | 37                               | 4                                | 4                                | 1                                | 1                                |                                  |                                  |                                  |                                  | 1                           | 9           |
|                                               |                                  | 10                               | 4                                | 35                               | 7                                | 42                               | 40                               | 3                                | 2                                | 1                                | 1                                |                                  |                                  |                                  |                                  | 1                           | 10          |

# 192 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

**TABLE H.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER YEARS, 1914 AND 1915—**

[The abbreviation "G. L. and M. W." stands for "Great Lakes and

| Line No.                                | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|-----------------------------------------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|                                         |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| Stockers:                               |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| Eastern—                                |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 1                                       | 9 plants.....                               | 1914  | 82                   | 55.3                              | \$0.197                         | \$10.78                            | 17                                             | 31                   | 14              | 18 | 2                    |    |                      |    |
| 2                                       |                                             | 1915  | 65                   | 55.8                              | .183                            | 10.13                              | 8                                              | 25                   | 14              | 18 |                      |    |                      |    |
| Pittsburgh—                             |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 3                                       | 7 plants.....                               | 1914  | 68                   | 55.1                              | .231                            | 12.54                              | 15                                             | 32                   |                 | 8  | 13                   |    |                      |    |
| 4                                       |                                             | 1915  | 73                   | 55.6                              | .233                            | 12.82                              | 15                                             | 32                   |                 | 11 | 15                   |    |                      |    |
| G. L. and M. W.—                        |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 5                                       | 7 plants.....                               | 1914  | 124                  | 60.8                              | .208                            | 12.66                              |                                                | 48                   |                 |    | 72                   | 4  |                      |    |
| 6                                       |                                             | 1915  | 137                  | 61.1                              | .209                            | 12.84                              |                                                | 48                   |                 |    | 85                   | 4  |                      |    |
| Southern—                               |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 7                                       | 5 plants.....                               | 1914  | 26                   | 56.2                              | .157                            | 8.71                               | 5                                              | 7                    | 4               | 6  | 4                    |    |                      |    |
| 8                                       |                                             | 1915  | 29                   | 55.7                              | .156                            | 8.58                               | 7                                              | 7                    | 3               | 8  | 4                    |    |                      |    |
| Total—                                  |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 9                                       | 23 plants.....                              | 1914  | 300                  | 57.6                              | .205                            | 11.78                              | 37                                             | 118                  | 18              | 32 | 91                   | 4  |                      |    |
| 10                                      |                                             | 1915  | 304                  | 58.1                              | .204                            | 11.85                              | 30                                             | 112                  | 17              | 37 | 104                  | 4  |                      |    |
| Puddlers:                               |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| Eastern—                                |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 11                                      | 8 plants.....                               | 1914  | 379                  | 55.2                              | .406                            | 22.42                              |                                                | 315                  | 64              |    |                      |    |                      |    |
| 12                                      |                                             | 1915  | 339                  | 52.3                              | .367                            | 19.22                              |                                                | 301                  | 38              |    |                      |    |                      |    |
| Pittsburgh—                             |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 13                                      | 2 plants.....                               | 1914  | 56                   | 51.4                              | .514                            | 26.39                              | 9                                              | 47                   |                 |    |                      |    |                      |    |
| 14                                      |                                             | 1915  | 65                   | 51.7                              | .527                            | 27.24                              | 7                                              | 58                   |                 |    |                      |    |                      |    |
| G. L. and M. W.—                        |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 15                                      | 1 plant.....                                | 1914  | 3                    | 54.5                              | .515                            | 28.09                              |                                                | 3                    |                 |    |                      |    |                      |    |
| 16                                      |                                             | 1915  | 5                    | 54.5                              | .488                            | 26.57                              |                                                | 5                    |                 |    |                      |    |                      |    |
| Southern—                               |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 17                                      | 2 plants.....                               | 1914  | 20                   | 57.7                              | .316                            | 18.26                              |                                                |                      | 20              |    |                      |    |                      |    |
| 18                                      |                                             | 1915  | 13                   | 57.9                              | .283                            | 16.38                              |                                                |                      | 13              |    |                      |    |                      |    |
| Total—                                  |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 19                                      | 13 plants.....                              | 1914  | 458                  | 54.8                              | .416                            | 22.76                              | 9                                              | 365                  | 84              |    |                      |    |                      |    |
| 20                                      |                                             | 1915  | 422                  | 52.4                              | .390                            | 20.45                              | 7                                              | 364                  | 51              |    |                      |    |                      |    |
| Puddlers, level-handed:                 |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| Eastern—                                |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 21                                      | 6 plants.....                               | 1914  | 114                  | 56.5                              | .341                            | 19.39                              |                                                | 32                   | 82              |    |                      |    |                      |    |
| 22                                      |                                             | 1915  | 130                  | 55.4                              | .294                            | 16.32                              |                                                | 54                   | 76              |    |                      |    |                      |    |
| Pittsburgh—                             |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 23                                      | 6 plants.....                               | 1914  | 662                  | 47.7                              | .435                            | 20.73                              | 406                                            | 256                  |                 |    |                      |    |                      |    |
| 24                                      |                                             | 1915  | 666                  | 46.0                              | .424                            | 19.48                              | 552                                            | 114                  |                 |    |                      |    |                      |    |
| G. L. and M. W.—                        |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 25                                      | 3 plants.....                               | 1914  | 80                   | 48.2                              | .466                            | 22.59                              | 36                                             | 44                   |                 |    |                      |    |                      |    |
| 26                                      |                                             | 1915  | 84                   | 47.5                              | .404                            | 19.14                              | 44                                             | 40                   |                 |    |                      |    |                      |    |
| Southern—                               |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 27                                      | 2 plants.....                               | 1914  | 40                   | 57.6                              | .220                            | 12.66                              |                                                |                      | 40              |    |                      |    |                      |    |
| 28                                      |                                             | 1915  | 44                   | 57.5                              | .190                            | 10.95                              |                                                |                      | 44              |    |                      |    |                      |    |
| Total—                                  |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 29                                      | 17 plants.....                              | 1914  | 896                  | 49.3                              | .416                            | 20.37                              | 442                                            | 332                  | 122             |    |                      |    |                      |    |
| 30                                      |                                             | 1915  | 924                  | 48.0                              | .392                            | 18.60                              | 596                                            | 208                  | 120             |    |                      |    |                      |    |
| Puddlers, level-handed, (with helpers): |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| Pittsburgh—                             |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 31                                      | 1 plant.....                                | 1914  | 16                   | 49.0                              | .395                            | 19.33                              |                                                | 16                   |                 |    |                      |    |                      |    |
| 32                                      |                                             | 1915  | 44                   | 49.0                              | .330                            | 16.15                              |                                                | 44                   |                 |    |                      |    |                      |    |
| Southern—                               |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 33                                      | 1 plant.....                                | 1914  | 18                   | 59.0                              | .292                            | 17.23                              |                                                |                      | 18              |    |                      |    |                      |    |
| 34                                      |                                             | 1915  | 24                   | 59.0                              | .315                            | 18.57                              |                                                |                      | 24              |    |                      |    |                      |    |
| Total—                                  |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 35                                      | 2 plants.....                               | 1914  | 34                   | 54.3                              | .340                            | 18.22                              |                                                | 16                   | 18              |    |                      |    |                      |    |
| 36                                      |                                             | 1915  | 68                   | 52.5                              | .324                            | 17.01                              |                                                | 44                   | 24              |    |                      |    |                      |    |

HOUR, AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY  
 PUDDLING MILLS.

Middle West." The figures for each group of years are for identical plants.]

| Employees whose rates of wages per hour were— |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | Line<br>No. |
|-----------------------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|-----------------------------|-------------|
| 8<br>and<br>under<br>10<br>cts.               | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>35<br>cts. | 35<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>45<br>cts. | 45<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>55<br>cts. | 55<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>65<br>cts. | 65<br>and<br>under<br>70<br>cts. | 70<br>cents<br>and<br>over. |             |
|                                               |                                  |                                  | 4<br>19                          | 28<br>20                         | 15<br>7                          | 28<br>15                         | 7<br>4                           |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 1<br>2      |
|                                               |                                  |                                  |                                  | 2<br>2                           | 6<br>6                           | 37<br>39                         | 20<br>19                         | 3<br>7                           |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 3<br>4      |
|                                               |                                  |                                  |                                  | 2<br>2                           | 12<br>12                         | 110<br>123                       |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 5<br>6      |
|                                               | 2<br>2                           | 3<br>5                           | 13<br>11                         | 3<br>6                           | 3<br>3                           | 2<br>2                           |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 7<br>8      |
|                                               | 2<br>2                           | 3<br>5                           | 17<br>39                         | 35<br>30                         | 36<br>28                         | 177<br>179                       | 27<br>23                         | 3<br>7                           |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 9<br>10     |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3<br>79                          | 259<br>221                       | 45<br>5                          | 68<br>34                         |                                  | 3                                | 1                                |                                  |                             | 11<br>12    |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 15<br>4                          | 35<br>34                         | 4<br>7                           |                                  |                                  |                             | 13<br>14    |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  | 2                                |                                  |                                  | 1                                |                                  |                             | 15<br>16    |
|                                               |                                  |                                  |                                  |                                  |                                  | 1<br>2                           | 4<br>8                           | 14<br>3                          | 1                                |                                  |                                  |                                  |                                  |                                  |                                  |                             | 17<br>18    |
|                                               |                                  |                                  |                                  |                                  |                                  | 1<br>2                           | 4<br>8                           | 17<br>82                         | 260<br>223                       | 47<br>5                          | 85<br>38                         | 35<br>36                         | 7<br>8                           | 2                                |                                  |                             | 19<br>20    |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 42<br>48                         | 20<br>40                         | 26<br>20                         | 26                               |                                  |                                  |                                  |                                  |                             | 21<br>22    |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 67<br>169                        | 424<br>401                       | 155<br>58                        | 16<br>30                         | 6                                |                                  |                                  |                             | 23<br>24    |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 8                                | 22                               | 30<br>46                         | 34<br>8                          | 12                               | 2                                | 2                                |                                  |                             | 25<br>26    |
|                                               |                                  |                                  |                                  |                                  | 6<br>20                          | 28<br>15                         | 6<br>1                           |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 27<br>28    |
|                                               |                                  |                                  |                                  |                                  | 6<br>20                          | 28<br>37                         | 48<br>49                         | 29<br>50                         | 93<br>211                        | 480<br>447                       | 189<br>66                        | 28<br>30                         | 2<br>6                           | 2                                |                                  |                             | 29<br>30    |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2<br>38                          | 6<br>4                           | 8                                |                                  |                                  |                                  |                                  |                             | 31<br>32    |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 12<br>2                          | 6<br>22                          |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 33<br>34    |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 12<br>4                          | 8<br>60                          | 6<br>4                           | 8                                |                                  |                                  |                                  |                                  |                                  |                             | 35<br>36    |

TABLE H.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER YEARS, 1914 AND 1915—

| Line No. | Occupation, district, and number of plants.                            | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|------------------------------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                                                        |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Puddlers, three-handed: Pittsburgh—4 plants.....                       | 1914  | 228                  | 47.1                              | \$0.294                         | \$13.80                            | 120                                            | 108                  |                 |    |                      |    |                      |    |
|          |                                                                        | 1915  | 258                  | 46.9                              | .297                            | 13.90                              | 168                                            | 90                   |                 |    |                      |    |                      |    |
| 3        | Southern—2 plants.....                                                 | 1914  | 27                   | 46.2                              | .346                            | 15.99                              | 27                                             |                      |                 |    |                      |    |                      |    |
|          |                                                                        | 1915  | 27                   | 46.3                              | .343                            | 15.86                              | 27                                             |                      |                 |    |                      |    |                      |    |
| 5        | Total—6 plants.....                                                    | 1914  | 255                  | 47.1                              | .299                            | 14.03                              | 147                                            | 108                  |                 |    |                      |    |                      |    |
|          |                                                                        | 1915  | 285                  | 46.8                              | .302                            | 14.09                              | 195                                            | 90                   |                 |    |                      |    |                      |    |
| 7        | Puddlers' helpers: Eastern—8 plants.....                               | 1914  | 379                  | 55.7                              | .237                            | 13.17                              |                                                | 244                  | 135             |    |                      |    |                      |    |
|          |                                                                        | 1915  | 339                  | 52.8                              | .213                            | 11.18                              |                                                | 233                  | 106             |    |                      |    |                      |    |
| 9        | Pittsburgh—3 plants.....                                               | 1914  | 64                   | 51.1                              | .289                            | 14.76                              | 9                                              | 55                   |                 |    |                      |    |                      |    |
|          |                                                                        | 1915  | 87                   | 51.0                              | .278                            | 14.24                              | 7                                              | 80                   |                 |    |                      |    |                      |    |
| 11       | G. L. and M. W.—1 plant.....                                           | 1914  | 3                    | 54.5                              | .298                            | 16.24                              |                                                | 3                    |                 |    |                      |    |                      |    |
|          |                                                                        | 1915  | 5                    | 54.5                              | .282                            | 15.37                              |                                                | 5                    |                 |    |                      |    |                      |    |
| 13       | Southern—3 plants.....                                                 | 1914  | 29                   | 58.1                              | .182                            | 10.58                              |                                                |                      | 29              |    |                      |    |                      |    |
|          |                                                                        | 1915  | 25                   | 58.4                              | .182                            | 10.62                              |                                                |                      | 25              |    |                      |    |                      |    |
| 15       | Total—15 plants.....                                                   | 1914  | 475                  | 55.2                              | .241                            | 13.25                              | 9                                              | 302                  | 164             |    |                      |    |                      |    |
|          |                                                                        | 1915  | 456                  | 52.8                              | .224                            | 11.78                              | 7                                              | 318                  | 131             |    |                      |    |                      |    |
| 17       | Busshelers: Eastern—2 plants.....                                      | 1914  | 9                    | 45.0                              | .509                            | 23.21                              | 6                                              | 3                    |                 |    |                      |    |                      |    |
|          |                                                                        | 1915  | 6                    | 47.5                              | .531                            | 26.39                              | 3                                              | 3                    |                 |    |                      |    |                      |    |
| 19       | G. L. and M. W.—1 plant.....                                           | 1914  | 5                    | 54.5                              | .481                            | 26.20                              |                                                | 5                    |                 |    |                      |    |                      |    |
|          |                                                                        | 1915  | 5                    | 54.5                              | .496                            | 27.03                              |                                                | 5                    |                 |    |                      |    |                      |    |
| 21       | Southern—1 plant.....                                                  | 1914  | 4                    | 57.5                              | .333                            | 19.15                              |                                                |                      | 4               |    |                      |    |                      |    |
|          |                                                                        | 1915  | 8                    | 57.5                              | .272                            | 15.65                              |                                                |                      | 8               |    |                      |    |                      |    |
| 23       | Total—4 plants.....                                                    | 1914  | 18                   | 50.4                              | .462                            | 23.14                              | 6                                              | 8                    | 4               |    |                      |    |                      |    |
|          |                                                                        | 1915  | 19                   | 53.6                              | .413                            | 22.03                              | 3                                              | 8                    | 8               |    |                      |    |                      |    |
| 25       | Busshelers, level-handed: Eastern—3 plants.....                        | 1914  | 86                   | 47.1                              | .390                            | 18.93                              | 44                                             | 42                   |                 |    |                      |    |                      |    |
|          |                                                                        | 1915  | 55                   | 45.8                              | .365                            | 17.00                              | 33                                             | 22                   |                 |    |                      |    |                      |    |
| 27       | Pittsburgh—3 plants.....                                               | 1914  | 12                   | 46.8                              | .617                            | 28.28                              | 8                                              | 4                    |                 |    |                      |    |                      |    |
|          |                                                                        | 1915  | 12                   | 45.3                              | .669                            | 30.25                              | 10                                             | 2                    |                 |    |                      |    |                      |    |
| 29       | Total—6 plants.....                                                    | 1914  | 98                   | 47.1                              | .418                            | 20.07                              | 52                                             | 46                   |                 |    |                      |    |                      |    |
|          |                                                                        | 1915  | 67                   | 45.7                              | .419                            | 19.37                              | 43                                             | 24                   |                 |    |                      |    |                      |    |
| 31       | Busshelers, level-handed (with helpers): G. L. and M. W.—7 plants..... | 1914  | 260                  | 43.3                              | .573                            | 24.23                              | 208                                            | 52                   |                 |    |                      |    |                      |    |
|          |                                                                        | 1915  | 232                  | 44.8                              | .536                            | 23.71                              | 160                                            | 72                   |                 |    |                      |    |                      |    |
| 33       | Southern—2 plants.....                                                 | 1914  | 14                   | 46.3                              | .411                            | 19.03                              | 14                                             |                      |                 |    |                      |    |                      |    |
|          |                                                                        | 1915  | 14                   | 46.3                              | .305                            | 14.11                              | 14                                             |                      |                 |    |                      |    |                      |    |
| 35       | Total—9 plants.....                                                    | 1914  | 274                  | 43.4                              | .565                            | 23.97                              | 222                                            | 52                   |                 |    |                      |    |                      |    |
|          |                                                                        | 1915  | 246                  | 44.9                              | .523                            | 23.16                              | 174                                            | 72                   |                 |    |                      |    |                      |    |

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TABLE H.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER YEARS, 1914 AND 1915—

| Line No. | Occupation, district, and number of plants.       | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|---------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Bushelers, three-handed: Pittsburgh—2 plants..... | 1914  | 42                   | 42.9                              | \$0.566                         | \$24.28                            | 42                                             |                      |                 |    |                      |    |                      |    |
|          |                                                   | 1915  | 18                   | 43.1                              | .714                            | 30.76                              | 18                                             |                      |                 |    |                      |    |                      |    |
| 3        | G. L. and M. W.—1 plant.....                      | 1914  | 12                   | 42.7                              | .523                            | 22.29                              | 12                                             |                      |                 |    |                      |    |                      |    |
|          |                                                   | 1915  | 9                    | 42.7                              | .451                            | 19.24                              | 9                                              |                      |                 |    |                      |    |                      |    |
| 5        | Total—3 plants.....                               | 1914  | 54                   | 42.8                              | .556                            | 23.84                              | 54                                             |                      |                 |    |                      |    |                      |    |
|          |                                                   | 1915  | 27                   | 43.0                              | .627                            | 26.92                              | 27                                             |                      |                 |    |                      |    |                      |    |
| 7        | Bushelers' helpers: Eastern—2 plants.....         | 1914  | 15                   | 43.0                              | .284                            | 12.20                              | 12                                             | 3                    |                 |    |                      |    |                      |    |
|          |                                                   | 1915  | 7                    | 46.4                              | .278                            | 13.33                              | 4                                              | 3                    |                 |    |                      |    |                      |    |
| 9        | G. L. and M. W.—7 plants.....                     | 1914  | 86                   | 49.9                              | .273                            | 13.47                              | 37                                             | 36                   | 13              |    |                      |    |                      |    |
|          |                                                   | 1915  | 74                   | 49.9                              | .262                            | 12.84                              | 29                                             | 40                   |                 |    | 5                    |    |                      |    |
| 11       | Southern—3 plants.....                            | 1914  | 11                   | 50.3                              | .164                            | 8.25                               | 7                                              |                      | 4               |    |                      |    |                      |    |
|          |                                                   | 1915  | 15                   | 52.3                              | .151                            | 7.82                               | 7                                              |                      | 8               |    |                      |    |                      |    |
| 13       | Total—12 plants.....                              | 1914  | 112                  | 49.0                              | .264                            | 12.79                              | 56                                             | 39                   | 17              |    |                      |    |                      |    |
|          |                                                   | 1915  | 96                   | 50.0                              | .246                            | 12.09                              | 40                                             | 43                   | 8               |    | 5                    |    |                      |    |
| 15       | Heaters: Eastern—3 plants.....                    | 1914  | 10                   | 54.9                              | .568                            | 31.15                              |                                                | 10                   |                 |    |                      |    |                      |    |
|          |                                                   | 1915  | 12                   | 54.0                              | .624                            | 33.75                              |                                                | 12                   |                 |    |                      |    |                      |    |
| 17       | Pittsburgh—2 plants.....                          | 1914  | 3                    | 48.4                              | .707                            | 34.28                              | 2                                              |                      | 1               |    |                      |    |                      |    |
|          |                                                   | 1915  | 3                    | 48.4                              | .794                            | 38.17                              | 2                                              |                      | 1               |    |                      |    |                      |    |
| 19       | G. L. and M. W.—1 plant.....                      | 1914  | 4                    | 42.7                              | 1.088                           | 46.42                              | 4                                              |                      |                 |    |                      |    |                      |    |
|          |                                                   | 1915  | 4                    | 42.7                              | .984                            | 41.98                              | 4                                              |                      |                 |    |                      |    |                      |    |
| 21       | Southern—3 plants.....                            | 1914  | 8                    | 51.2                              | .698                            | 35.24                              | 6                                              |                      |                 |    | 2                    |    |                      |    |
|          |                                                   | 1915  | 8                    | 51.2                              | .739                            | 36.83                              | 6                                              |                      |                 |    | 2                    |    |                      |    |
| 23       | Total—9 plants.....                               | 1914  | 25                   | 51.0                              | .709                            | 35.28                              | 12                                             | 10                   | 1               |    | 2                    |    |                      |    |
|          |                                                   | 1915  | 27                   | 50.9                              | .730                            | 36.37                              | 12                                             | 12                   | 1               |    | 2                    |    |                      |    |
| 25       | Heaters' helpers: Eastern—3 plants.....           | 1914  | 14                   | 54.8                              | .257                            | 14.07                              |                                                | 14                   |                 |    |                      |    |                      |    |
|          |                                                   | 1915  | 18                   | 54.2                              | .262                            | 14.18                              |                                                | 18                   |                 |    |                      |    |                      |    |
| 27       | Pittsburgh—1 plant.....                           | 1914  | 4                    | 44.0                              | .375                            | 16.50                              | 4                                              |                      |                 |    |                      |    |                      |    |
|          |                                                   | 1915  | 4                    | 44.0                              | .375                            | 16.50                              | 4                                              |                      |                 |    |                      |    |                      |    |
| 29       | G. L. and M. W.—1 plant.....                      | 1914  | 12                   | 52.4                              | .441                            | 21.55                              | 8                                              |                      |                 |    |                      |    | 4                    |    |
|          |                                                   | 1915  | 12                   | 52.4                              | .424                            | 20.83                              | 8                                              |                      |                 |    |                      |    | 4                    |    |
| 31       | Southern—3 plants.....                            | 1914  | 18                   | 52.0                              | .253                            | 12.72                              | 12                                             |                      |                 |    | 6                    |    |                      |    |
|          |                                                   | 1915  | 18                   | 52.0                              | .261                            | 13.12                              | 12                                             |                      |                 |    | 6                    |    |                      |    |
| 33       | Total—8 plants.....                               | 1914  | 48                   | 52.3                              | .311                            | 15.63                              | 24                                             | 14                   |                 |    | 6                    | 4  |                      |    |
|          |                                                   | 1915  | 52                   | 52.3                              | .308                            | 15.53                              | 24                                             | 18                   |                 |    | 6                    | 4  |                      |    |
| 35       | Bloom boys: Eastern—8 plants.....                 | 1914  | 42                   | 55.9                              | .183                            | 10.27                              |                                                | 28                   | 10              | 4  |                      |    |                      |    |
|          |                                                   | 1915  | 32                   | 54.9                              | .183                            | 10.10                              |                                                | 22                   | 8               | 2  |                      |    |                      |    |
| 37       | Pittsburgh—4 plants.....                          | 1914  | 12                   | 48.4                              | .270                            | 13.07                              | 6                                              | 6                    |                 |    |                      |    |                      |    |
|          |                                                   | 1915  | 12                   | 49.9                              | .261                            | 13.15                              | 6                                              | 4                    |                 |    | 2                    |    |                      |    |
| 39       | G. L. and M. W.—8 plants.....                     | 1914  | 14                   | 54.3                              | .231                            | 12.32                              | 3                                              | 7                    |                 |    | 4                    |    |                      |    |
|          |                                                   | 1915  | 14                   | 54.3                              | .228                            | 12.12                              | 3                                              | 7                    |                 |    | 4                    |    |                      |    |
| 41       | Southern—5 plants.....                            | 1914  | 9                    | 54.4                              | .144                            | 7.75                               | 3                                              |                      | 5               |    | 1                    |    |                      |    |
|          |                                                   | 1915  | 10                   | 55.0                              | .132                            | 7.16                               | 3                                              |                      | 5               |    | 2                    |    |                      |    |





## 198 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

TABLE H.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER YEARS, 1914 AND 1915—

| Line No. | Occupation, district, and number of plants. | Year. | Number of employ-ees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|---------------------------------------------|-------|-----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                             |       |                       |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Bloom boys—Concld. Total—                   | 1914  | 77                    | 54.3                              | \$0.201                         | \$10.79                            | 12                                             | 41                   | 15              | 4  | 5                    |    |                      |    |
| 2        | 25 plants.....                              | 1915  | 68                    | 53.9                              | .199                            | 10.62                              | 12                                             | 33                   | 13              | 2  | 8                    |    |                      |    |
| 3        | Roll engineers: Eastern—                    | 1914  | 18                    | 67.8                              | .212                            | 14.23                              |                                                |                      | 2               |    | 9                    | 7  |                      |    |
| 4        | 8 plants.....                               | 1915  | 16                    | 67.6                              | .210                            | 14.00                              |                                                |                      | 2               |    | 7                    | 7  |                      |    |
| 5        | Pittsburgh—                                 | 1914  | 10                    | 64.5                              | .236                            | 18.37                              |                                                | 2                    |                 |    | 6                    | 2  |                      |    |
| 6        | 4 plants.....                               | 1915  | 10                    | 64.5                              | .236                            | 18.37                              |                                                | 2                    |                 |    | 6                    | 2  |                      |    |
| 7        | G. L. and M. W.—                            | 1914  | 12                    | 69.8                              | .271                            | 18.91                              |                                                |                      |                 |    | 6                    | 4  | 2                    |    |
| 8        | 7 plants.....                               | 1915  | 12                    | 69.9                              | .279                            | 19.50                              |                                                |                      |                 |    | 5                    | 5  | 2                    |    |
| 9        | Southern—                                   | 1914  | 7                     | 63.4                              | .183                            | 11.63                              |                                                |                      |                 | 5  |                      | 2  |                      |    |
| 10       | 4 plants.....                               | 1915  | 7                     | 63.4                              | .191                            | 12.08                              |                                                |                      |                 | 5  |                      | 2  |                      |    |
| 11       | Total—                                      | 1914  | 47                    | 66.9                              | .239                            | 15.92                              |                                                | 2                    | 2               | 5  | 21                   | 15 | 2                    |    |
| 12       | 23 plants.....                              | 1915  | 45                    | 66.9                              | .242                            | 16.14                              |                                                | 2                    | 2               | 5  | 18                   | 16 | 2                    |    |
| 13       | Rollers: Eastern—                           | 1914  | 37                    | 55.4                              | .403                            | 22.39                              |                                                | 25                   | 10              | 2  |                      |    |                      |    |
| 14       | 9 plants.....                               | 1915  | 34                    | 54.1                              | .400                            | 21.59                              |                                                | 24                   | 8               | 2  |                      |    |                      |    |
| 15       | Pittsburgh—                                 | 1914  | 13                    | 51.0                              | .883                            | 43.74                              | 6                                              | 5                    |                 |    | 2                    |    |                      |    |
| 16       | 6 plants.....                               | 1915  | 14                    | 51.6                              | .885                            | 45.56                              | 7                                              | 3                    |                 |    | 4                    |    |                      |    |
| 17       | G. L. and M. W.—                            | 1914  | 10                    | 47.5                              | .806                            | 36.61                              | 6                                              | 3                    |                 |    | 1                    |    |                      |    |
| 18       | 5 plants.....                               | 1915  | 10                    | 47.5                              | .831                            | 38.36                              | 6                                              | 3                    |                 |    | 1                    |    |                      |    |
| 19       | Southern—                                   | 1914  | 6                     | 52.5                              | .555                            | 29.36                              | 3                                              |                      | 2               |    | 1                    |    |                      |    |
| 20       | 4 plants.....                               | 1915  | 6                     | 52.5                              | .503                            | 26.22                              | 3                                              |                      | 2               |    | 1                    |    |                      |    |
| 21       | Total—                                      | 1914  | 66                    | 53.1                              | .573                            | 29.38                              | 15                                             | 33                   | 12              | 2  | 4                    |    |                      |    |
| 22       | 24 plants.....                              | 1915  | 64                    | 52.4                              | .583                            | 29.89                              | 16                                             | 30                   | 10              | 2  | 6                    |    |                      |    |
| 23       | Roughers: Eastern—                          | 1914  | 10                    | 55.8                              | .296                            | 16.47                              |                                                | 8                    |                 | 2  |                      |    |                      |    |
| 24       | 2 plants.....                               | 1915  | 10                    | 55.8                              | .332                            | 18.41                              |                                                | 8                    |                 | 2  |                      |    |                      |    |
| 25       | Pittsburgh—                                 | 1914  | 20                    | 50.3                              | .419                            | 20.78                              | 10                                             | 10                   |                 |    | 2                    |    |                      |    |
| 26       | 5 plants.....                               | 1915  | 20                    | 51.2                              | .463                            | 23.71                              | 10                                             | 8                    |                 |    |                      |    |                      |    |
| 27       | G. L. and M. W.—                            | 1914  | 30                    | 51.8                              | .531                            | 26.86                              | 12                                             | 9                    |                 |    | 9                    |    |                      |    |
| 28       | 8 plants.....                               | 1915  | 28                    | 50.8                              | .482                            | 23.98                              | 12                                             | 11                   |                 |    | 5                    |    |                      |    |
| 29       | Southern—                                   | 1914  | 11                    | 51.8                              | .337                            | 17.06                              | 6                                              |                      | 4               |    | 1                    |    |                      |    |
| 30       | 5 plants.....                               | 1915  | 11                    | 51.8                              | .301                            | 15.15                              | 6                                              |                      | 4               |    | 1                    |    |                      |    |
| 31       | Total—                                      | 1914  | 71                    | 51.9                              | .436                            | 22.17                              | 28                                             | 27                   | 4               | 2  | 10                   |    |                      |    |
| 32       | 20 plants.....                              | 1915  | 69                    | 51.8                              | .426                            | 21.69                              | 28                                             | 27                   | 4               | 2  | 8                    |    |                      |    |
| 33       | Catchers: Eastern—                          | 1914  | 47                    | 55.5                              | .315                            | 17.54                              |                                                | 33                   | 10              | 4  |                      |    |                      |    |
| 34       | 9 plants.....                               | 1915  | 44                    | 54.5                              | .318                            | 17.30                              |                                                | 34                   | 6               | 4  |                      |    |                      |    |
| 35       | Pittsburgh—                                 | 1914  | 21                    | 50.2                              | .408                            | 20.22                              | 10                                             | 11                   |                 |    |                      |    |                      |    |
| 36       | 6 plants.....                               | 1915  | 22                    | 51.0                              | .442                            | 22.54                              | 10                                             | 10                   |                 |    | 2                    |    |                      |    |
| 37       | G. L. and M. W.—                            | 1914  | 14                    | 50.4                              | .485                            | 23.59                              | 6                                              | 5                    |                 |    | 3                    |    |                      |    |
| 38       | 7 plants.....                               | 1915  | 13                    | 49.2                              | .441                            | 21.00                              | 6                                              | 6                    |                 |    | 1                    |    |                      |    |
| 39       | Southern—                                   | 1914  | 9                     | 54.8                              | .307                            | 16.56                              | 3                                              |                      | 4               |    | 2                    |    |                      |    |
| 40       | 5 plants.....                               | 1915  | 9                     | 54.6                              | .273                            | 14.68                              | 3                                              |                      | 4               |    | 2                    |    |                      |    |
| 41       | Total—                                      | 1914  | 91                    | 53.4                              | .362                            | 18.99                              | 19                                             | 49                   | 14              | 4  | 5                    |    |                      |    |
| 42       | 27 plants.....                              | 1915  | 88                    | 52.8                              | .363                            | 18.89                              | 19                                             | 50                   | 10              | 4  | 5                    |    |                      |    |

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TABLE H.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER YEARS, 1914 AND 1915—

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |       |                      |       |                      |       |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-------|----------------------|-------|----------------------|-------|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60    | Over 60 and under 72 | 72    | Over 72 and under 84 | 84    |
| 1        | Hook-ups: Eastern—                          | 1914  | 44                   | 55.5                              | \$0.211                         | \$11.74                            | .....                                          | 30                   | 10              | 4     | .....                | ..... | .....                | ..... |
| 2        | 9 plants.....                               | 1915  | 42                   | 54.4                              | .195                            | 10.57                              | .....                                          | 30                   | 8               | 4     | .....                | ..... | .....                | ..... |
| 3        | Pittsburgh—                                 | 1914  | 15                   | 51.9                              | .316                            | 15.92                              | 6                                              | 5                    | .....           | ..... | 4                    | ..... | .....                | ..... |
| 4        | 6 plants.....                               | 1915  | 16                   | 52.9                              | .332                            | 17.39                              | 6                                              | 4                    | .....           | ..... | 6                    | ..... | .....                | ..... |
| 5        | G. L. and M. W.—                            | 1914  | 27                   | 55.1                              | .309                            | 17.07                              | 6                                              | 9                    | .....           | ..... | 12                   | ..... | .....                | ..... |
| 6        | 8 plants.....                               | 1915  | 25                   | 54.3                              | .266                            | 14.19                              | 6                                              | 11                   | .....           | ..... | 8                    | ..... | .....                | ..... |
| 7        | Southern—                                   | 1914  | 11                   | 51.7                              | .183                            | 9.15                               | 6                                              | .....                | 4               | ..... | 1                    | ..... | .....                | ..... |
| 8        | 4 plants.....                               | 1915  | 11                   | 51.7                              | .162                            | 8.07                               | 6                                              | .....                | 4               | ..... | 1                    | ..... | .....                | ..... |
| 9        | Total—                                      | 1914  | 97                   | 54.4                              | .251                            | 13.58                              | 18                                             | 44                   | 14              | 4     | 17                   | ..... | .....                | ..... |
| 10       | 27 plants.....                              | 1915  | 94                   | 53.8                              | .233                            | 12.40                              | 18                                             | 45                   | 12              | 4     | 15                   | ..... | .....                | ..... |
| 11       | Roll hands, other: Eastern—                 | 1914  | 8                    | 52.5                              | .292                            | 15.29                              | .....                                          | 6                    | 2               | ..... | .....                | ..... | .....                | ..... |
| 12       | 3 plants.....                               | 1915  | 5                    | 53.8                              | .277                            | 14.90                              | .....                                          | 3                    | 2               | ..... | .....                | ..... | .....                | ..... |
| 13       | Pittsburgh—                                 | 1914  | 4                    | 52.3                              | .340                            | 17.78                              | .....                                          | 4                    | .....           | ..... | .....                | ..... | .....                | ..... |
| 14       | 2 plants.....                               | 1915  | 4                    | 56.8                              | .408                            | 23.27                              | .....                                          | 2                    | .....           | ..... | 2                    | ..... | .....                | ..... |
| 15       | Southern—                                   | 1914  | 5                    | 50.8                              | .233                            | 11.52                              | 3                                              | .....                | 2               | ..... | .....                | ..... | .....                | ..... |
| 16       | 3 plants.....                               | 1915  | 5                    | 50.8                              | .222                            | 10.90                              | 3                                              | .....                | 2               | ..... | .....                | ..... | .....                | ..... |
| 17       | Total—                                      | 1914  | 17                   | 51.9                              | .286                            | 14.75                              | 3                                              | 10                   | 4               | ..... | .....                | ..... | .....                | ..... |
| 18       | 8 plants.....                               | 1915  | 14                   | 53.6                              | .295                            | 15.86                              | 3                                              | 5                    | 4               | ..... | 2                    | ..... | .....                | ..... |
| 19       | Hotbed men: Eastern—                        | 1914  | 54                   | 55.2                              | .230                            | 12.67                              | .....                                          | 34                   | 16              | 4     | .....                | ..... | .....                | ..... |
| 20       | 9 plants.....                               | 1915  | 48                   | 54.7                              | .225                            | 12.30                              | .....                                          | 30                   | 14              | 4     | .....                | ..... | .....                | ..... |
| 21       | Pittsburgh—                                 | 1914  | 31                   | 52.3                              | .281                            | 14.24                              | 14                                             | 9                    | .....           | ..... | 8                    | ..... | .....                | ..... |
| 22       | 7 plants.....                               | 1915  | 32                   | 53.3                              | .281                            | 14.54                              | 14                                             | 6                    | .....           | ..... | 12                   | ..... | .....                | ..... |
| 23       | G. L. and M. W.—                            | 1914  | 21                   | 55.0                              | .271                            | 14.61                              | 6                                              | 6                    | .....           | ..... | 9                    | ..... | .....                | ..... |
| 24       | 5 plants.....                               | 1915  | 21                   | 55.0                              | .274                            | 14.75                              | 6                                              | 6                    | .....           | ..... | 9                    | ..... | .....                | ..... |
| 25       | Southern—                                   | 1914  | 11                   | 53.2                              | .167                            | 9.05                               | 5                                              | .....                | 4               | ..... | 2                    | ..... | .....                | ..... |
| 26       | 5 plants.....                               | 1915  | 11                   | 53.1                              | .150                            | 8.03                               | 5                                              | .....                | 4               | ..... | 2                    | ..... | .....                | ..... |
| 27       | Total—                                      | 1914  | 117                  | 54.2                              | .245                            | 13.10                              | 25                                             | 49                   | 20              | 4     | 19                   | ..... | .....                | ..... |
| 28       | 26 plants.....                              | 1915  | 112                  | 54.2                              | .243                            | 12.98                              | 25                                             | 42                   | 18              | 4     | 23                   | ..... | .....                | ..... |
| 29       | Shearmen: Eastern—                          | 1914  | 9                    | 58.0                              | .216                            | 12.44                              | .....                                          | 2                    | 6               | 1     | .....                | ..... | .....                | ..... |
| 30       | 4 plants.....                               | 1915  | 9                    | 59.1                              | .198                            | 11.69                              | .....                                          | .....                | 6               | 3     | .....                | ..... | .....                | ..... |
| 31       | Pittsburgh—                                 | 1914  | 10                   | 58.1                              | .289                            | 16.77                              | .....                                          | 6                    | .....           | ..... | 4                    | ..... | .....                | ..... |
| 32       | 5 plants.....                               | 1915  | 10                   | 59.9                              | .298                            | 17.94                              | .....                                          | 4                    | .....           | ..... | 6                    | ..... | .....                | ..... |
| 33       | G. L. and M. W.—                            | 1914  | 9                    | 58.9                              | .271                            | 16.06                              | .....                                          | 5                    | .....           | ..... | 4                    | ..... | .....                | ..... |
| 34       | 5 plants.....                               | 1915  | 9                    | 58.9                              | .271                            | 16.06                              | .....                                          | 5                    | .....           | ..... | 4                    | ..... | .....                | ..... |
| 35       | Southern—                                   | 1914  | 15                   | 55.5                              | .200                            | 11.01                              | .....                                          | 7                    | .....           | 8     | .....                | ..... | .....                | ..... |
| 36       | 5 plants.....                               | 1915  | 11                   | 53.8                              | .223                            | 12.03                              | .....                                          | 7                    | .....           | 4     | .....                | ..... | .....                | ..... |
| 37       | Total—                                      | 1914  | 43                   | 57.3                              | .239                            | 13.70                              | .....                                          | 22                   | 6               | 9     | 8                    | ..... | .....                | ..... |
| 38       | 19 plants.....                              | 1915  | 39                   | 57.8                              | .247                            | 14.40                              | .....                                          | 16                   | 6               | 7     | 10                   | ..... | .....                | ..... |

HOURLY AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY  
 PUDDLING MILLS—Continued.

| Employees whose rates of wages per hour were— |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | Line<br>No. |
|-----------------------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|-----------------------------|-------------|
| 8<br>and<br>under<br>10<br>cts.               | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>35<br>cts. | 35<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>45<br>cts. | 45<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>55<br>cts. | 55<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>65<br>cts. | 65<br>and<br>under<br>70<br>cts. | 70<br>cents<br>and<br>over. |             |
|                                               |                                  |                                  |                                  | 12<br>18                         | 3<br>9                           | 8<br>8                           | 8<br>7                           | 2<br>2                           | 2                                |                                  |                                  |                                  |                                  |                                  |                                  |                             | 1           |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 2           |
|                                               |                                  |                                  |                                  |                                  |                                  | 6                                | 3                                | 9                                | 2                                | 3                                | 1                                |                                  |                                  |                                  |                                  |                             | 3           |
|                                               |                                  |                                  |                                  |                                  | 2                                |                                  | 1                                |                                  |                                  | 2                                | 2                                |                                  |                                  |                                  |                                  |                             | 4           |
|                                               |                                  |                                  |                                  |                                  | 4                                | 4                                | 7                                | 4                                | 9                                | 1                                |                                  | 2                                |                                  |                                  |                                  |                             | 5           |
|                                               |                                  |                                  |                                  | 2                                | 4                                | 6                                | 3                                | 4                                | 6                                |                                  |                                  |                                  |                                  |                                  |                                  |                             | 6           |
| 1<br>2                                        | 2<br>3                           |                                  | 1                                | 2                                | 1                                | 1                                | 4                                |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 7           |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 8           |
| 1<br>2                                        | 2<br>3                           |                                  | 13<br>18                         | 5<br>3                           | 14<br>15                         | 18<br>15                         | 22<br>13                         | 2<br>15                          | 13<br>6                          | 4<br>2                           | 1<br>2                           | 2                                |                                  |                                  |                                  |                             | 9           |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 10          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 7<br>5                           | 1                                |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 11          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 12          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 1                                |                                  |                                  |                                  |                                  |                                  |                                  |                             | 13          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 3                                |                                  |                                  |                                  |                                  |                                  |                                  |                             | 14          |
|                                               |                                  |                                  |                                  | 2                                | 2                                |                                  | 1                                | 1                                | 1                                |                                  |                                  |                                  |                                  |                                  |                                  |                             | 15          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                | 1                                |                                  |                                  |                                  |                                  |                                  |                                  |                             | 16          |
|                                               |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 17          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 8                                | 5                                | 1                                |                                  |                                  |                                  |                                  |                                  |                             | 18          |
|                                               |                                  |                                  |                                  | 2                                |                                  |                                  | 1                                | 6                                | 1                                | 3                                |                                  |                                  |                                  |                                  |                                  |                             | 19          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 20          |
|                                               |                                  |                                  |                                  | 6                                | 16<br>10                         | 2                                | 12<br>17                         | 24<br>9                          |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 21          |
|                                               |                                  |                                  |                                  |                                  | 4                                |                                  | 9                                | 7                                | 5                                | 2                                | 3                                | 1                                |                                  |                                  |                                  |                             | 22          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 13                               | 3                                | 7                                | 2                                | 2                                | 2                                |                                  |                                  |                                  |                             | 23          |
|                                               |                                  |                                  |                                  |                                  |                                  | 3                                | 8                                |                                  | 8                                | 2                                |                                  |                                  |                                  |                                  |                                  |                             | 24          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 11                               | 4                                | 4                                | 2                                |                                  |                                  |                                  |                                  |                                  |                             | 25          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 26          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 27          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 28          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 29          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 30          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 31          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 32          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 33          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 34          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 35          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 36          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 37          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 38          |

TABLE H.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER YEARS, 1914 AND 1915—

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |     |                      |    |                      |    |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-----|----------------------|----|----------------------|----|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60  | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Shearmen's helpers: Eastern—                | 1914  | 28                   | 57.1                              | \$0.186                         | \$10.58                            |                                                | 12                   | 14              | 2   |                      |    |                      |    |
| 2        | 5 plants.....                               | 1915  | 27                   | 57.1                              | .179                            | 10.17                              |                                                | 12                   | 13              | 2   |                      |    |                      |    |
| 3        | Pittsburgh—                                 | 1914  | 24                   | 61.8                              | .227                            | 14.10                              |                                                | 8                    |                 |     |                      | 16 |                      |    |
| 4        | 5 plants.....                               | 1915  | 24                   | 62.5                              | .251                            | 15.69                              |                                                | 6                    |                 |     |                      | 18 |                      |    |
| 5        | G. L. and M. W.—                            | 1914  | 30                   | 60.4                              | .210                            | 12.69                              |                                                | 12                   |                 |     |                      | 18 |                      |    |
| 6        | 5 plants.....                               | 1915  | 30                   | 60.4                              | .210                            | 12.69                              |                                                | 12                   |                 |     |                      | 18 |                      |    |
| 7        | Southern—                                   | 1914  | 28                   | 53.0                              | .150                            | 7.86                               |                                                | 20                   |                 | 8   |                      |    |                      |    |
| 8        | 5 plants.....                               | 1915  | 28                   | 53.0                              | .151                            | 7.93                               |                                                | 20                   |                 | 8   |                      |    |                      |    |
| 9        | Total—                                      | 1914  | 110                  | 58.0                              | .192                            | 11.23                              |                                                | 52                   | 14              | 10  | 34                   |    |                      |    |
| 10       | 20 plants.....                              | 1915  | 109                  | 58.1                              | .196                            | 11.50                              |                                                | 50                   | 13              | 10  | 36                   |    |                      |    |
| 11       | Laborers: Eastern—                          | 1914  | 130                  | 59.9                              | .163                            | 9.79                               |                                                |                      | 11              | 118 |                      | 1  |                      |    |
| 12       | 6 plants.....                               | 1915  | 147                  | 56.8                              | .157                            | 8.91                               |                                                | 48                   | 6               | 93  |                      |    |                      |    |
| 13       | Pittsburgh—                                 | 1914  | 116                  | 61.1                              | .190                            | 11.65                              |                                                | 20                   | 32              | 4   | 59                   | 1  |                      |    |
| 14       | 7 plants.....                               | 1915  | 89                   | 59.9                              | .189                            | 11.33                              |                                                | 20                   | 28              | 4   | 37                   |    |                      |    |
| 15       | G. L. and M. W.—                            | 1914  | 41                   | 58.0                              | .182                            | 10.61                              |                                                | 20                   | 11              |     | 10                   |    |                      |    |
| 16       | 7 plants.....                               | 1915  | 31                   | 57.7                              | .180                            | 10.46                              |                                                | 20                   | 1               |     | 10                   |    |                      |    |
| 17       | Southern—                                   | 1914  | 35                   | 54.4                              | .144                            | 7.81                               |                                                | 19                   | 4               | 12  |                      |    |                      |    |
| 18       | 4 plants.....                               | 1915  | 36                   | 54.4                              | .146                            | 7.89                               |                                                | 19                   | 7               | 10  |                      |    |                      |    |
| 19       | Total—                                      | 1914  | 322                  | 59.5                              | .173                            | 10.35                              |                                                | 59                   | 58              | 134 | 69                   | 2  |                      |    |
| 20       | 24 plants.....                              | 1915  | 303                  | 57.5                              | .167                            | 9.66                               |                                                | 107                  | 42              | 107 | 47                   |    |                      |    |
| 21       | Unclassified—productive: Eastern—           | 1914  | 43                   | 57.4                              | .186                            | 10.67                              |                                                | 24                   | 2               | 14  | 2                    | 1  |                      |    |
| 22       | 7 plants.....                               | 1915  | 24                   | 55.3                              | .186                            | 10.28                              |                                                | 20                   | 1               | 2   |                      | 1  |                      |    |
| 23       | Pittsburgh—                                 | 1914  | 118                  | 55.4                              | .233                            | 12.66                              | 19                                             | 59                   | 2               | 7   | 17                   | 14 |                      |    |
| 24       | 7 plants.....                               | 1915  | 126                  | 54.7                              | .261                            | 13.82                              | 31                                             | 56                   |                 | 3   | 22                   | 14 |                      |    |
| 25       | G. L. and M. W.—                            | 1914  | 108                  | 60.7                              | .225                            | 13.07                              | 17                                             | 24                   |                 | 5   | 46                   | 14 | 2                    |    |
| 26       | 8 plants.....                               | 1915  | 82                   | 56.2                              | .247                            | 12.97                              | 27                                             | 17                   |                 |     | 23                   | 13 | 2                    |    |
| 27       | Southern—                                   | 1914  | 85                   | 53.4                              | .227                            | 11.73                              | 26                                             | 20                   | 15              | 15  | 9                    |    |                      |    |
| 28       | 5 plants.....                               | 1915  | 96                   | 54.2                              | .226                            | 11.87                              | 25                                             | 20                   | 12              | 29  | 10                   |    |                      |    |
| 29       | Total—                                      | 1914  | 354                  | 56.8                              | .223                            | 12.32                              | 62                                             | 127                  | 19              | 41  | 74                   | 29 | 2                    |    |
| 30       | 27 plants.....                              | 1915  | 328                  | 55.0                              | .242                            | 12.78                              | 83                                             | 113                  | 13              | 34  | 55                   | 28 | 2                    |    |
| 31       | Unclassified—nonproductive: Eastern—        | 1914  | 98                   | 64.8                              | .225                            | 14.40                              |                                                | 20                   | 2               | 30  | 22                   | 2  | 17                   | 5  |
| 32       | 7 plants.....                               | 1915  | 97                   | 61.8                              | .221                            | 13.34                              |                                                | 33                   | 4               | 25  | 18                   | 2  | 10                   | 5  |
| 33       | Pittsburgh—                                 | 1914  | 31                   | 64.9                              | .254                            | 15.82                              | 5                                              | 2                    |                 | 5   | 9                    | 2  | 4                    | 4  |
| 34       | 7 plants.....                               | 1915  | 31                   | 63.7                              | .259                            | 15.79                              | 6                                              | 2                    |                 | 4   | 11                   | 2  | 2                    | 4  |
| 35       | G. L. and M. W.—                            | 1914  | 8                    | 71.5                              | .213                            | 15.06                              |                                                |                      |                 |     | 2                    | 4  | 2                    |    |
| 36       | 4 plants.....                               | 1915  | 8                    | 71.5                              | .222                            | 15.74                              |                                                |                      |                 |     | 2                    | 4  | 2                    |    |
| 37       | Southern—                                   | 1914  | 10                   | 63.8                              | .166                            | 10.51                              | 1                                              | 2                    |                 | 3   |                      | 2  |                      | 2  |
| 38       | 3 plants.....                               | 1915  | 10                   | 63.8                              | .166                            | 10.51                              | 1                                              | 2                    |                 | 3   |                      | 2  |                      | 2  |
| 39       | Total—                                      | 1914  | 147                  | 65.1                              | .226                            | 14.47                              | 6                                              | 24                   | 2               | 38  | 33                   | 10 | 23                   | 11 |
| 40       | 21 plants.....                              | 1915  | 146                  | 62.9                              | .225                            | 13.80                              | 7                                              | 37                   | 4               | 32  | 31                   | 10 | 14                   | 11 |

HOUR, AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY  
 PUDDLING MILLS—Concluded.

| Employees whose rates of wages per hour were— |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | Line No. |
|-----------------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|--------------------|----------|
| 8 and under 10 cts.                           | 10 and under 12 cts. | 12 and under 14 cts. | 14 and under 16 cts. | 16 and under 18 cts. | 18 and under 20 cts. | 20 and under 25 cts. | 25 and under 30 cts. | 30 and under 35 cts. | 35 and under 40 cts. | 40 and under 45 cts. | 45 and under 50 cts. | 50 and under 55 cts. | 55 and under 60 cts. | 60 and under 65 cts. | 65 and under 70 cts. | 70 cents and over. |          |
|                                               |                      |                      | 4                    | 8                    | 1                    | 15                   |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 1        |
|                                               |                      |                      | 10                   | 2                    |                      | 15                   |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 2        |
|                                               |                      |                      |                      |                      | 1                    | 1                    | 15                   | 8                    |                      |                      |                      |                      |                      |                      |                      |                    | 3        |
|                                               |                      |                      |                      |                      |                      | 1                    | 14                   | 4                    | 4                    |                      |                      |                      |                      |                      |                      |                    | 4        |
|                                               |                      |                      |                      |                      |                      | 2                    | 28                   |                      |                      |                      |                      |                      |                      |                      |                      |                    | 5        |
|                                               |                      |                      |                      |                      | 2                    | 2                    | 28                   |                      |                      |                      |                      |                      |                      |                      |                      |                    | 6        |
|                                               |                      |                      | 12                   | 11                   |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 7        |
|                                               |                      | 12                   | 11                   | 3                    |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 8        |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 9        |
|                                               |                      | 12                   | 15                   | 11                   | 4                    | 60                   | 8                    |                      |                      |                      |                      |                      |                      |                      |                      |                    | 10       |
|                                               |                      | 12                   | 21                   | 6                    | 3                    | 59                   | 4                    | 4                    |                      |                      |                      |                      |                      |                      |                      |                    | 11       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 12       |
|                                               |                      |                      | 7                    | 123                  |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 13       |
|                                               |                      |                      | 83                   | 64                   |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 14       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 15       |
|                                               |                      |                      |                      | 40                   | 15                   | 61                   |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 16       |
|                                               |                      |                      |                      | 36                   | 14                   | 39                   |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 17       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 18       |
|                                               |                      |                      |                      | 16                   | 13                   | 12                   |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 19       |
|                                               |                      |                      |                      | 16                   | 3                    | 12                   |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 20       |
|                                               |                      | 12                   | 23                   |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 21       |
|                                               |                      | 10                   | 26                   |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 22       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 23       |
|                                               |                      | 12                   | 30                   | 179                  | 28                   | 73                   |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 24       |
|                                               |                      | 10                   | 109                  | 116                  | 17                   | 51                   |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 25       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 26       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 27       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 28       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 29       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 30       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 31       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 32       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 33       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 34       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 35       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 36       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 37       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 38       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 39       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 40       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 41       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 42       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 43       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 44       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 45       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 46       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 47       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 48       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 49       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 50       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 51       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 52       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 53       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 54       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 55       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 56       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 57       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 58       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 59       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 60       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 61       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 62       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 63       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 64       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 65       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 66       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 67       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 68       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 69       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 70       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 71       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 72       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 73       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 74       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 75       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 76       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 77       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 78       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 79       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 80       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 81       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 82       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 83       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 84       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 85       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 86       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 87       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 88       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 89       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 90       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 91       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 92       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 93       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 94       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 95       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 96       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 97       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 98       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 99       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                    | 100      |

# BLOOMING MILLS.<sup>1</sup>

## SUMMARY.

In 1915, the average rate of wages or earnings per hour in the blooming-mill department was from 5 per cent lower to 14 per cent higher than in any one of the five years preceding. There was a marked increase in the full-time weekly earnings from 1910 to 1913, inclusive, but in 1914 and 1915 the average full-time weekly earnings were 5 per cent less than in 1913.

The most significant facts concerning wages and hours of labor of blooming-mill employees for the years 1910 to 1915 are summarized by means of averages and percentages in Table 25. The data for 1915 represents 2,659 employees; of these 1,066 are in the 12 specified occupations, and the remaining 1,593 in the unclassified groups tabulated in 1914 and 1915 for the first time. They were obtained from 23 plants and for 28 separate mills, capable of producing 37 per cent of the total tonnage of blooming mills in the United States.

In this table occupations are grouped according to the wages paid, beginning with the lowest-paid group, and the occupations in each group are presented in alphabetical order. Classified full-time hours per week and rates of wages per hour are shown by percentages which were computed from the actual figures of Table I.

TABLE 25.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, FULL-TIME WEEKLY EARNINGS PER HOUR, 1910 TO 1915—BLOOMING MILLS.

[The figures for each group of years are for identical plants.]

| Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |    |                      |    | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                      | Average full-time weekly earnings. |
|-----------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|----------------------|----|----------------------|----|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|----------------------|------------------------------------|
|                                   |       |                      |                                   | 48 and under.                                              | Over 48 and under 72 | 72 | Over 72 and under 84 | 84 |                                 | 12 and under 14 cts.                                | 14 and under 16 cts. | 16 and under 18 cts. | 18 and under 20 cts. | 20 and under 25 cts. |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |    |                                 |                                                     |                      |                      |                      |                      |                                    |
| Laborers:                         |       |                      |                                   |                                                            |                      |    |                      |    |                                 |                                                     |                      |                      |                      |                      |                                    |
| 19 plants.....                    | 1910  | 449                  | 74.1                              | .....                                                      | 16                   | 54 | 6                    | 24 | \$0.162                         | 10                                                  | 13                   | 77                   | .....                | .....                | \$11.97                            |
|                                   | 1911  | 363                  | 73.7                              | .....                                                      | 14                   | 59 | 9                    | 18 | .163                            | 12                                                  | 8                    | 79                   | .....                | .....                | 12.02                              |
|                                   | 1912  | 396                  | 73.8                              | .....                                                      | 14                   | 57 | 11                   | 18 | .164                            | 10                                                  | 1                    | 89                   | .....                | .....                | 12.13                              |
| 19 plants.....                    | 1912  | 344                  | 74.0                              | .....                                                      | 16                   | 50 | 13                   | 21 | .163                            | 12                                                  | 2                    | 87                   | .....                | .....                | 12.08                              |
|                                   | 1913  | 352                  | 73.4                              | .....                                                      | 20                   | 54 | 12                   | 15 | .184                            | 3                                                   | 10                   | 18                   | 55                   | 16                   | 13.53                              |
| 19 plants.....                    | 1913  | 292                  | 73.1                              | .....                                                      | 24                   | 50 | 15                   | 11 | .185                            | 3                                                   | 7                    | 22                   | 54                   | 14                   | 13.51                              |
|                                   | 1914  | 212                  | 72.0                              | (1)                                                        | 23                   | 66 | 7                    | 4  | .187                            | 8                                                   | 7                    | 43                   | 22                   | 32                   | 13.44                              |
| 22 plants.....                    | 1914  | 267                  | 71.7                              | (1)                                                        | 21                   | 69 | 5                    | 4  | .187                            | 3                                                   | 3                    | 21                   | 61                   | 13                   | 13.39                              |
|                                   | 1915  | 290                  | 72.3                              | (1)                                                        | 18                   | 66 | 13                   | 3  | .187                            | 2                                                   | 6                    | 16                   | 63                   | 13                   | 13.49                              |

<sup>1</sup> Summary figures relating to the blooming-mill department of the iron and steel industry are given with figures for other departments on pages 7 to 26; an account of the volume of employment in this and other departments from July, 1913, to June, 1915, is given on pages 26 to 55; and an explanation of the scope of the investigation and of the methods employed is given on pages 55 to 59.



TABLE 25.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, FULL-TIME WEEKLY EARNINGS PER HOUR, 1910 TO 1915—*BLOOMING MILLS*—Continued.

| Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |    |                      |       | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                   | Average full-time weekly earnings. |
|-----------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|----------------------|----|----------------------|-------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|-------------------|------------------------------------|
|                                   |       |                      |                                   | 48 and under.                                              | Over 48 and under 72 | 72 | Over 72 and under 84 | 84    |                                 | 12 and under 16 cts.                                | 16 and under 20 cts. | 20 and under 30 cts. | 30 and under 40 cts. | 40 cts. and over. |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |                                    |
| Bottom makers' helpers:           |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |                                    |
| 12 plants.....                    | 1910  | 47                   | 70.3                              | .....                                                      | 13                   | 79 | .....                | 9     | \$0.251                         | 9                                                   | 17                   | 49                   | 26                   | .....             | \$17.23                            |
|                                   | 1911  | 46                   | 70.3                              | .....                                                      | 20                   | 65 | 11                   | 4     | .243                            | 9                                                   | 15                   | 54                   | 22                   | .....             | 16.83                              |
|                                   | 1912  | 46                   | 70.4                              | .....                                                      | 20                   | 61 | 15                   | 4     | .257                            | 4                                                   | 13                   | 57                   | 26                   | .....             | 17.84                              |
| 13 plants.....                    | 1912  | 50                   | 70.6                              | .....                                                      | 12                   | 60 | 24                   | 4     | .257                            | 4                                                   | 12                   | 60                   | 24                   | .....             | 17.95                              |
|                                   | 1913  | 55                   | 70.8                              | .....                                                      | 11                   | 56 | 26                   | 7     | .276                            | .....                                               | 22                   | 36                   | 42                   | .....             | 19.33                              |
| 13 plants.....                    | 1913  | 65                   | 72.0                              | .....                                                      | 9                    | 51 | 31                   | 9     | .263                            | .....                                               | 31                   | 34                   | 35                   | .....             | 18.72                              |
|                                   | 1914  | 56                   | 71.3                              | .....                                                      | 11                   | 48 | 36                   | 5     | .258                            | .....                                               | 20                   | 57                   | 23                   | .....             | 18.14                              |
| 17 plants.....                    | 1914  | 70                   | 69.8                              | 9                                                          | 9                    | 44 | 34                   | 4     | .273                            | .....                                               | 16                   | 57                   | 19                   | 9                 | 18.45                              |
|                                   | 1915  | 76                   | 70.5                              | 8                                                          | 9                    | 38 | 39                   | 5     | .269                            | 3                                                   | 17                   | 49                   | 24                   | 8                 | 18.46                              |
| Shearmen's helpers:               |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |                                    |
| 18 plants.....                    | 1910  | 100                  | 70.9                              | 3                                                          | 17                   | 56 | 10                   | 14    | .218                            | 14                                                  | 35                   | 42                   | 9                    | .....             | 15.15                              |
|                                   | 1911  | 96                   | 69.5                              | 3                                                          | 24                   | 58 | 13                   | 2     | .217                            | 14                                                  | 26                   | 57                   | 3                    | .....             | 14.90                              |
|                                   | 1912  | 93                   | 70.1                              | .....                                                      | 25                   | 62 | 11                   | 2     | .237                            | 1                                                   | 31                   | 49                   | 18                   | .....             | 16.44                              |
| 18 plants.....                    | 1912  | 99                   | 70.2                              | .....                                                      | 23                   | 65 | 10                   | 2     | .230                            | 3                                                   | 33                   | 49                   | 15                   | .....             | 15.93                              |
|                                   | 1913  | 101                  | 70.5                              | .....                                                      | 21                   | 55 | 24                   | ..... | .259                            | 1                                                   | 26                   | 48                   | 25                   | 1                 | 18.07                              |
| 18 plants.....                    | 1913  | 111                  | 69.5                              | 5                                                          | 17                   | 56 | 22                   | ..... | .267                            | 1                                                   | 27                   | 43                   | 23                   | 6                 | 18.17                              |
|                                   | 1914  | 98                   | 68.7                              | .....                                                      | 20                   | 78 | 2                    | ..... | .249                            | .....                                               | 20                   | 59                   | 20                   | .....             | 16.83                              |
| 20 plants.....                    | 1914  | 113                  | 68.4                              | 3                                                          | 18                   | 80 | .....                | ..... | .256                            | .....                                               | 19                   | 55                   | 26                   | .....             | 17.23                              |
|                                   | 1915  | 114                  | 68.5                              | 3                                                          | 18                   | 78 | 2                    | ..... | .258                            | .....                                               | 25                   | 46                   | 26                   | 3                 | 17.35                              |
| Unclassified—productive:          |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |                                    |
| 23 plants.....                    | 1914  | 445                  | 72.0                              | (1)                                                        | 14                   | 64 | 12                   | 10    | .220                            | 3                                                   | 30                   | 61                   | 5                    | 1                 | 15.75                              |
|                                   | 1915  | 481                  | 72.6                              | .....                                                      | 12                   | 60 | 17                   | 10    | .219                            | 4                                                   | 35                   | 54                   | 6                    | 2                 | 15.81                              |
| Unclassified—nonproductive:       |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |                                    |
| 22 plants.....                    | 1914  | 973                  | 72.7                              | 1                                                          | 18                   | 59 | 7                    | 16    | .219                            | 2                                                   | 26                   | 64                   | 7                    | 1                 | 15.92                              |
|                                   | 1915  | 1,112                | 72.8                              | (1)                                                        | 17                   | 59 | 8                    | 15    | .218                            | 2                                                   | 25                   | 66                   | 7                    | 1                 | 15.86                              |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |                                    |
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|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |                                    |
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|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |                                    |
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|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |                                    |
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|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |                                    |
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|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |                                    |

<sup>1</sup> Less than one-half of 1 per cent.

# 206 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

TABLE 25.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, FULL-TIME WEEKLY EARNINGS PER HOUR, 1910 TO 1915—BLOOMING MILLS—Continued.

| Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |    |                      |    |                      | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                   |         |  | Average full-time weekly earnings. |
|-----------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|----------------------|----|----------------------|----|----------------------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|-------------------|---------|--|------------------------------------|
|                                   |       |                      |                                   | 48 and under.                                              | Over 48 and under 72 | 72 | Over 72 and under 84 | 84 | 16 and under 20 cts. |                                 | 20 and under 30 cts.                                | 30 and under 40 cts. | 40 and under 50 cts. | 50 cts. and over. |         |  |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |    |                      |                                 |                                                     |                      |                      |                   |         |  |                                    |
| Shearmen:                         |       |                      |                                   |                                                            |                      |    |                      |    |                      |                                 |                                                     |                      |                      |                   |         |  |                                    |
| 19 plants                         | 1910  | 48                   | 70.0                              | 6                                                          | 15                   | 58 | 13                   | 8  | \$0.303              |                                 | 50                                                  | 44                   |                      | 6                 | \$20.85 |  |                                    |
|                                   | 1911  | 46                   | 69.4                              | 7                                                          | 20                   | 61 | 9                    | 4  | .306                 | 9                               | 30                                                  | 50                   | 11                   |                   | 20.96   |  |                                    |
|                                   | 1912  | 46                   | 69.5                              | 7                                                          | 20                   | 61 | 9                    | 4  | .328                 |                                 | 33                                                  | 46                   | 17                   | 4                 | 22.39   |  |                                    |
| 19 plants                         | 1912  | 52                   | 69.8                              | 6                                                          | 17                   | 65 | 8                    | 4  | .319                 | 4                               | 33                                                  | 44                   | 15                   | 4                 | 21.93   |  |                                    |
|                                   | 1913  | 52                   | 69.6                              | 6                                                          | 17                   | 58 | 19                   |    | .363                 |                                 | 31                                                  | 37                   | 21                   | 12                | 24.80   |  |                                    |
| 19 plants                         | 1913  | 56                   | 67.2                              | 16                                                         | 16                   | 50 | 18                   |    | .370                 |                                 | 29                                                  | 34                   | 27                   | 11                | 24.23   |  |                                    |
|                                   | 1914  | 58                   | 65.6                              | 10                                                         | 24                   | 62 | 3                    |    | .329                 |                                 | 34                                                  | 48                   | 12                   | 5                 | 21.16   |  |                                    |
| 23 plants                         | 1914  | 65                   | 65.0                              | 14                                                         | 25                   | 62 |                      |    | .345                 |                                 | 34                                                  | 40                   | 17                   | 9                 | 21.84   |  |                                    |
|                                   | 1915  | 62                   | 65.9                              | 10                                                         | 24                   | 66 |                      |    | .362                 |                                 | 34                                                  | 31                   | 19                   | 16                | 23.09   |  |                                    |
| Table men:                        |       |                      |                                   |                                                            |                      |    |                      |    |                      |                                 |                                                     |                      |                      |                   |         |  |                                    |
| 13 plants                         | 1910  | 36                   | 69.3                              | 8                                                          | 19                   | 56 | 6                    | 11 | .271                 | 17                              | 56                                                  | 19                   |                      | 8                 | 18.03   |  |                                    |
|                                   | 1911  | 35                   | 68.7                              |                                                            | 34                   | 49 | 11                   | 6  | .254                 | 23                              | 51                                                  | 26                   |                      |                   | 17.05   |  |                                    |
|                                   | 1912  | 35                   | 68.7                              |                                                            | 34                   | 49 | 11                   | 6  | .285                 | 14                              | 46                                                  | 31                   | 9                    |                   | 19.00   |  |                                    |
| 12 plants                         | 1912  | 33                   | 68.5                              |                                                            | 36                   | 46 | 12                   | 6  | .290                 | 12                              | 45                                                  | 33                   | 9                    |                   | 19.24   |  |                                    |
|                                   | 1913  | 31                   | 68.0                              |                                                            | 32                   | 55 | 13                   |    | .316                 | 7                               | 39                                                  | 32                   | 13                   | 10                | 20.95   |  |                                    |
| 11 plants                         | 1913  | 29                   | 67.3                              |                                                            | 35                   | 59 | 7                    |    | .322                 | 7                               | 34                                                  | 34                   | 14                   | 10                | 21.14   |  |                                    |
|                                   | 1914  | 31                   | 67.4                              |                                                            | 28                   | 65 | 6                    |    | .277                 | 6                               | 48                                                  | 45                   |                      |                   | 18.34   |  |                                    |
| 14 plants                         | 1914  | 36                   | 63.6                              | 17                                                         | 26                   | 58 |                      |    | .314                 | 6                               | 33                                                  | 42                   | 19                   |                   | 19.36   |  |                                    |
|                                   | 1915  | 34                   | 63.1                              | 18                                                         | 27                   | 56 |                      |    | .327                 | 6                               | 32                                                  | 38                   | 18                   | 6                 | 19.94   |  |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |    |                      | 20 and under 30 cts.            | 30 and under 40 cts.                                | 40 and under 50 cts. | 50 and under 60 cts. | 60 cts. and over. |         |  |                                    |
| Manipulators:                     |       |                      |                                   |                                                            |                      |    |                      |    |                      |                                 |                                                     |                      |                      |                   |         |  |                                    |
| 19 plants                         | 1910  | 52                   | 68.4                              | 12                                                         | 19                   | 56 | 6                    | 8  | .365                 | 39                              | 29                                                  | 23                   | 4                    | 6                 | 24.21   |  |                                    |
|                                   | 1911  | 48                   | 67.9                              | 6                                                          | 29                   | 50 | 10                   | 4  | .350                 | 40                              | 27                                                  | 27                   | 6                    |                   | 23.26   |  |                                    |
|                                   | 1912  | 47                   | 66.6                              | 13                                                         | 26                   | 47 | 11                   | 4  | .390                 | 28                              | 30                                                  | 23                   | 9                    | 11                | 24.94   |  |                                    |
| 19 plants                         | 1912  | 49                   | 66.8                              | 12                                                         | 24                   | 49 | 10                   | 4  | .388                 | 27                              | 33                                                  | 22                   | 8                    | 10                | 24.92   |  |                                    |
|                                   | 1913  | 51                   | 66.5                              | 12                                                         | 28                   | 47 | 14                   |    | .432                 | 16                              | 37                                                  | 22                   | 8                    | 18                | 27.60   |  |                                    |
| 19 plants                         | 1913  | 60                   | 65.3                              | 10                                                         | 33                   | 42 | 15                   |    | .431                 | 18                              | 32                                                  | 22                   | 13                   | 15                | 26.86   |  |                                    |
|                                   | 1914  | 54                   | 63.8                              | 22                                                         | 21                   | 54 | 4                    |    | .386                 | 22                              | 37                                                  | 30                   | 6                    | 6                 | 23.89   |  |                                    |
| 23 plants                         | 1914  | 62                   | 62.4                              | 19                                                         | 27                   | 53 |                      |    | .394                 | 18                              | 34                                                  | 39                   | 5                    | 5                 | 23.95   |  |                                    |
|                                   | 1915  | 60                   | 63.4                              | 15                                                         | 26                   | 58 |                      |    | .420                 | 15                              | 28                                                  | 33                   | 18                   | 5                 | 25.81   |  |                                    |
| Pit cranimen:                     |       |                      |                                   |                                                            |                      |    |                      |    |                      |                                 |                                                     |                      |                      |                   |         |  |                                    |
| 18 plants                         | 1910  | 99                   | 69.6                              |                                                            | 29                   | 51 | 4                    | 16 | .315                 | 43                              | 34                                                  | 22                   |                      |                   | 21.41   |  |                                    |
|                                   | 1911  | 95                   | 68.8                              |                                                            | 34                   | 50 | 6                    | 11 | .309                 | 41                              | 55                                                  | 4                    |                      |                   | 21.01   |  |                                    |
|                                   | 1912  | 97                   | 68.7                              |                                                            | 37                   | 46 | 6                    | 10 | .328                 | 35                              | 51                                                  | 14                   |                      |                   | 22.33   |  |                                    |
| 19 plants                         | 1912  | 95                   | 71.6                              |                                                            | 25                   | 47 | 17                   | 11 | .319                 | 42                              | 43                                                  | 15                   |                      |                   | 22.63   |  |                                    |
|                                   | 1913  | 99                   | 71.4                              |                                                            | 20                   | 55 | 20                   | 5  | .373                 | 10                              | 46                                                  | 44                   |                      |                   | 26.48   |  |                                    |
| 19 plants                         | 1913  | 115                  | 69.3                              |                                                            | 28                   | 52 | 16                   | 4  | .369                 | 13                              | 45                                                  | 42                   |                      |                   | 25.39   |  |                                    |
|                                   | 1914  | 105                  | 69.0                              |                                                            | 22                   | 49 | 19                   | 4  | .337                 | 20                              | 66                                                  | 14                   |                      |                   | 23.04   |  |                                    |
| 23 plants                         | 1914  | 124                  | 66.6                              | 5                                                          | 31                   | 44 | 16                   | 3  | .357                 | 14                              | 67                                                  | 12                   | 7                    |                   | 23.29   |  |                                    |
|                                   | 1915  | 119                  | 66.7                              | 5                                                          | 28                   | 44 | 22                   | 1  | .375                 | 13                              | 53                                                  | 24                   | 9                    |                   | 24.44   |  |                                    |
| Roll engineers:                   |       |                      |                                   |                                                            |                      |    |                      |    |                      |                                 |                                                     |                      |                      |                   |         |  |                                    |
| 18 plants                         | 1910  | 42                   | 70.9                              | 7                                                          | 17                   | 45 | 17                   | 14 | .392                 | 12                              | 41                                                  | 36                   | 5                    | 7                 | 27.12   |  |                                    |
|                                   | 1911  | 40                   | 70.9                              | 8                                                          | 20                   | 38 | 20                   | 15 | .385                 | 10                              | 58                                                  | 18                   | 15                   |                   | 26.66   |  |                                    |
|                                   | 1912  | 41                   | 69.2                              | 15                                                         | 20                   | 32 | 20                   | 15 | .428                 |                                 | 59                                                  | 5                    | 32                   | 5                 | 28.65   |  |                                    |
| 19 plants                         | 1912  | 46                   | 68.4                              | 13                                                         | 22                   | 24 | 33                   | 9  | .437                 | 4                               | 52                                                  | 4                    | 28                   | 11                | 28.79   |  |                                    |
|                                   | 1913  | 46                   | 68.0                              | 13                                                         | 22                   | 28 | 33                   | 4  | .491                 |                                 | 37                                                  | 17                   | 15                   | 30                | 32.04   |  |                                    |
| 19 plants                         | 1913  | 52                   | 68.5                              | 12                                                         | 20                   | 37 | 29                   | 4  | .471                 |                                 | 44                                                  | 15                   | 13                   | 27                | 30.96   |  |                                    |
|                                   | 1914  | 52                   | 67.5                              | 12                                                         | 20                   | 44 | 21                   | 4  | .425                 | 4                               | 50                                                  | 23                   | 13                   | 10                | 27.81   |  |                                    |
| 23 plants                         | 1914  | 60                   | 65.6                              | 20                                                         | 16                   | 43 | 17                   | 3  | .447                 | 3                               | 43                                                  | 22                   | 18                   | 13                | 28.30   |  |                                    |
|                                   | 1915  | 59                   | 65.4                              | 20                                                         | 15                   | 46 | 15                   | 3  | .471                 |                                 | 39                                                  | 22                   | 20                   | 19                | 29.81   |  |                                    |

TABLE 25.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, FULL-TIME WEEKLY EARNINGS, 1910 TO 1915—BLOOMING MILLS—Concluded.

| Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |    |                      |       | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                   | Average full-time weekly earnings. |
|-----------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|----------------------|----|----------------------|-------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|-------------------|------------------------------------|
|                                   |       |                      |                                   | 48 and under.                                              | Over 48 and under 72 | 72 | Over 72 and under 84 | 84    |                                 | 30 and under 40 cts.                                | 40 and under 50 cts. | 50 and under 60 cts. | 60 and under 70 cts. | 70 cts. and over. |                                    |
|                                   |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |                                    |
| Heaters:                          |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |                                    |
| 19 plants.....                    | 1910  | 51                   | 73.4                              | .....                                                      | 10                   | 61 | 8                    | 22    | \$0.521                         | 8                                                   | 29                   | 45                   | 14                   | 4                 | \$37.88                            |
|                                   | 1911  | 49                   | 73.3                              | .....                                                      | 16                   | 51 | 12                   | 20    | .512                            | 8                                                   | 35                   | 45                   | 4                    | 8                 | 37.50                              |
|                                   | 1912  | 53                   | 73.6                              | .....                                                      | 15                   | 59 | 8                    | 19    | .556                            | .....                                               | 26                   | 43                   | 15                   | 15                | 40.42                              |
| 19 plants.....                    | 1912  | 55                   | 72.9                              | .....                                                      | 15                   | 60 | 7                    | 18    | .552                            | .....                                               | 29                   | 42                   | 15                   | 15                | 40.14                              |
|                                   | 1913  | 53                   | 73.2                              | .....                                                      | 15                   | 51 | 15                   | 19    | .604                            | .....                                               | 23                   | 34                   | 19                   | 25                | 44.18                              |
| 19 plants.....                    | 1913  | 79                   | 71.2                              | .....                                                      | 24                   | 38 | 23                   | 15    | .594                            | 5                                                   | 15                   | 33                   | 25                   | 22                | 41.86                              |
|                                   | 1914  | 77                   | 70.7                              | .....                                                      | 23                   | 43 | 21                   | 13    | .513                            | 16                                                  | 36                   | 32                   | 8                    | 8                 | 36.12                              |
| 23 plants.....                    | 1914  | 89                   | 69.3                              | .....                                                      | 27                   | 46 | 16                   | 11    | .542                            | 11                                                  | 34                   | 38                   | 7                    | 10                | 37.03                              |
|                                   | 1915  | 84                   | 69.9                              | .....                                                      | 24                   | 42 | 24                   | 10    | .584                            | 1                                                   | 23                   | 37                   | 30                   | 10                | 40.06                              |
| Rollers:                          |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |                                    |
| 18 plants.....                    | 1910  | 46                   | 67.6                              | 13                                                         | 17                   | 63 | .....                | 7     | .605                            | .....                                               | 35                   | 24                   | 24                   | 17                | 40.00                              |
|                                   | 1911  | 41                   | 66.6                              | 7                                                          | 29                   | 59 | 5                    | ..... | .585                            | .....                                               | 27                   | 32                   | 29                   | 12                | 38.49                              |
|                                   | 1912  | 42                   | 65.0                              | 14                                                         | 29                   | 52 | 5                    | ..... | .652                            | .....                                               | 17                   | 31                   | 17                   | 36                | 41.41                              |
| 19 plants.....                    | 1912  | 46                   | 65.9                              | 13                                                         | 26                   | 52 | 9                    | ..... | .632                            | 4                                                   | 20                   | 28                   | 15                   | 33                | 40.53                              |
|                                   | 1913  | 46                   | 66.2                              | 13                                                         | 26                   | 48 | 13                   | ..... | .703                            | 4                                                   | 9                    | 24                   | 20                   | 44                | 45.11                              |
| 19 plants.....                    | 1913  | 46                   | 66.2                              | 13                                                         | 26                   | 48 | 13                   | ..... | .701                            | 4                                                   | 9                    | 24                   | 20                   | 43                | 44.98                              |
|                                   | 1914  | 46                   | 65.5                              | 13                                                         | 24                   | 59 | 4                    | ..... | .632                            | 4                                                   | 17                   | 20                   | 28                   | 30                | 40.51                              |
| 23 plants.....                    | 1914  | 54                   | 63.6                              | 17                                                         | 27                   | 57 | .....                | ..... | .684                            | .....                                               | 17                   | 20                   | 28                   | 35                | 42.44                              |
|                                   | 1915  | 53                   | 63.5                              | 17                                                         | 25                   | 58 | .....                | ..... | .697                            | .....                                               | 11                   | 23                   | 25                   | 42                | 43.26                              |

Referring to the first occupation presented, laborers, direct comparison can be made of data for 19 identical plants for 1910 to 1912, inclusive, for a second group of 19 plants in 1912 and 1913, for a third group of 19 plants in 1913 and 1914, and for a group of 22 plants in 1915. The first line of Table 25 is read as follows: In 1910 the 19 blooming mills from which reports were obtained employed 449 laborers whose average full-time hours of work were 74.1 per week. For 16 per cent of the 449 laborers the full-time hours per week were over 48 and under 72; for 54 per cent, 72; for 6 per cent, over 72 and under 84; and for 24 per cent, 84 hours per week. The average rate of wages or earnings per hour of laborers in the year considered (1910) was 16.2 cents. Of the total number, 10 per cent received 12 and under 14 cents per hour; 13 per cent, 14 and under 16 cents; and 77 per cent, 16 and under 18 cents per hour. The average full-time weekly earnings were \$11.97. The other lines of the table may be read in the same manner.

Referring to the last column of the table, it is seen that in 19 plants the average full-time weekly earnings of laborers were \$11.97 in 1910. In 1911 there was a slight advance to \$12.02, and in 1912 a further small advance to \$12.13. In the second group of 19 plants the full-time weekly earnings were \$12.08 in 1912, with an advance

of \$1.45 per week for the following year, making \$13.53 for 1913. In the third group of 19 plants there is little change for 1913, as shown by the figures \$13.51, while there was a slight drop to \$13.44 in 1914. In the group of 22 plants for 1914 and 1915 the full-time weekly earnings were \$13.39 for 1914 and \$13.49 for 1915. Comparing the average full-time weekly earnings for 1915 of the several occupations, it is seen that the lowest average was that of laborers, which was \$13.49, and the highest that of rollers, which was \$43.26.

#### INDEX NUMBERS.

To aid in making a comparison of the actual data for the six years, which will give an accurate measure of the changes throughout the period, relative or index numbers have been computed from the averages of Table 25 for full-time hours per week, rates of wages per hour, and full-time weekly earnings, for each occupation from 1910 to 1915, inclusive. Such figures appear in Table 26.

These relative or index numbers are simply percentages for which the data for 1915 are taken as the base, or 100 per cent. The relative for each year is the per cent which the average for that year is of the average for 1915. For example, the relative full-time weekly earnings of pit cranemen in 1910 were 86, as compared with 100 in 1915; that is, the full-time weekly earnings in 1910 were 86 per cent of the full-time weekly earnings in this occupation in 1915. The method of computing relative numbers is explained on pages 65 to 67.

Table 26 also shows for each occupation the per cent of increase or decrease in full-time hours per week, rates of wages per hour, and full-time weekly earnings in 1915, as compared with each specified year preceding. Thus the full-time weekly earnings of pit cranemen in 1915 were 16 per cent higher than in 1910, 18 per cent higher than in 1911, 11 per cent higher than in 1912, 5 per cent lower than in 1913, and 5 per cent higher than in 1914.

In other columns of the table is shown the per cent of change in each year as compared with the year immediately preceding. Thus the full-time weekly earnings of pit cranemen in 1911 were 1 per cent lower than in 1910, 6 per cent higher in 1912 than in 1911, 17 per cent higher in 1913 than in 1912, 10 per cent lower in 1914 than in 1913, and 5 per cent higher in 1915 than in 1914. The other occupations and items of the table can be studied in like manner. The percentages of increase and decrease are computed from the relative numbers.

TABLE 28.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATIONS—BLOOMING MILLS.

| Occupation and year.           | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|--------------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                                | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in— |                                                      |
|                                |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| <b>Pit cranemen:</b>           |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                      | 102                                | -2                                           | .....                                                | 88                               | +16                                          | .....                                                | 86                                  | +16                                          | .....                                                |
| 1911.....                      | 101                                | -1                                           | -1                                                   | 84                               | +19                                          | -2                                                   | 85                                  | +18                                          | -1                                                   |
| 1912.....                      | 101                                | -1                                           | ( <sup>1</sup> )                                     | 89                               | +12                                          | +6                                                   | 90                                  | +11                                          | +6                                                   |
| 1913.....                      | 100                                | ( <sup>1</sup> )                             | -1                                                   | 104                              | -4                                           | +17                                                  | 105                                 | -5                                           | +17                                                  |
| 1914.....                      | 100                                | ( <sup>1</sup> )                             | ( <sup>1</sup> )                                     | 95                               | +5                                           | -9                                                   | 95                                  | +5                                           | -10                                                  |
| 1915.....                      | 100                                | .....                                        | ( <sup>1</sup> )                                     | 100                              | .....                                        | +5                                                   | 100                                 | .....                                        | +5                                                   |
| <b>Heaters:</b>                |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                      | 100                                | ( <sup>1</sup> )                             | .....                                                | 92                               | +9                                           | .....                                                | 91                                  | +10                                          | .....                                                |
| 1911.....                      | 100                                | ( <sup>1</sup> )                             | ( <sup>1</sup> )                                     | 91                               | +10                                          | -1                                                   | 90                                  | +11                                          | -1                                                   |
| 1912.....                      | 99                                 | +1                                           | -1                                                   | 98                               | +2                                           | +8                                                   | 97                                  | +3                                           | +8                                                   |
| 1913.....                      | 100                                | ( <sup>1</sup> )                             | +1                                                   | 108                              | -7                                           | +10                                                  | 107                                 | -7                                           | +10                                                  |
| 1914.....                      | 99                                 | +1                                           | -1                                                   | 93                               | +8                                           | -14                                                  | 92                                  | +9                                           | -14                                                  |
| 1915.....                      | 100                                | .....                                        | +1                                                   | 100                              | .....                                        | +8                                                   | 100                                 | .....                                        | +9                                                   |
| <b>Heaters' helpers:</b>       |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                      | 102                                | -2                                           | .....                                                | 90                               | +11                                          | .....                                                | 91                                  | +10                                          | .....                                                |
| 1911.....                      | 102                                | -2                                           | ( <sup>1</sup> )                                     | 95                               | +5                                           | +6                                                   | 98                                  | +2                                           | +8                                                   |
| 1912.....                      | 102                                | -2                                           | ( <sup>1</sup> )                                     | 93                               | +8                                           | -2                                                   | 94                                  | +6                                           | -4                                                   |
| 1913.....                      | 101                                | -1                                           | -1                                                   | 103                              | -3                                           | +11                                                  | 104                                 | -4                                           | +11                                                  |
| 1914.....                      | 101                                | -1                                           | ( <sup>1</sup> )                                     | 96                               | +4                                           | -7                                                   | 96                                  | +4                                           | -8                                                   |
| 1915.....                      | 100                                | .....                                        | -1                                                   | 100                              | .....                                        | +4                                                   | 100                                 | .....                                        | +4                                                   |
| <b>Bottom makers:</b>          |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                      | 100                                | ( <sup>1</sup> )                             | .....                                                | 87                               | +15                                          | .....                                                | 87                                  | +15                                          | .....                                                |
| 1911.....                      | 100                                | ( <sup>1</sup> )                             | ( <sup>1</sup> )                                     | 86                               | +16                                          | -1                                                   | 87                                  | +15                                          | ( <sup>1</sup> )                                     |
| 1912.....                      | 100                                | ( <sup>1</sup> )                             | ( <sup>1</sup> )                                     | 91                               | +10                                          | +6                                                   | 92                                  | +9                                           | +6                                                   |
| 1913.....                      | 100                                | ( <sup>1</sup> )                             | ( <sup>1</sup> )                                     | 101                              | -1                                           | +11                                                  | 102                                 | -2                                           | +11                                                  |
| 1914.....                      | 100                                | ( <sup>1</sup> )                             | ( <sup>1</sup> )                                     | 95                               | +5                                           | -6                                                   | 96                                  | +4                                           | -6                                                   |
| 1915.....                      | 100                                | .....                                        | ( <sup>1</sup> )                                     | 100                              | .....                                        | +5                                                   | 100                                 | .....                                        | +4                                                   |
| <b>Bottom-makers' helpers:</b> |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                      | 100                                | ( <sup>1</sup> )                             | .....                                                | 94                               | +6                                           | .....                                                | 93                                  | +8                                           | .....                                                |
| 1911.....                      | 100                                | ( <sup>1</sup> )                             | ( <sup>1</sup> )                                     | 91                               | +10                                          | -3                                                   | 90                                  | +11                                          | -3                                                   |
| 1912.....                      | 100                                | ( <sup>1</sup> )                             | ( <sup>1</sup> )                                     | 96                               | +4                                           | +5                                                   | 96                                  | +4                                           | +7                                                   |
| 1913.....                      | 100                                | ( <sup>1</sup> )                             | ( <sup>1</sup> )                                     | 103                              | -3                                           | +7                                                   | 103                                 | -3                                           | +7                                                   |
| 1914.....                      | 99                                 | +1                                           | -1                                                   | 102                              | -2                                           | -1                                                   | 100                                 | ( <sup>1</sup> )                             | -3                                                   |
| 1915.....                      | 100                                | .....                                        | +1                                                   | 100                              | .....                                        | -2                                                   | 100                                 | .....                                        | ( <sup>1</sup> )                                     |
| <b>Roll engineers:</b>         |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                      | 105                                | -5                                           | .....                                                | 86                               | +16                                          | .....                                                | 90                                  | +11                                          | .....                                                |
| 1911.....                      | 105                                | -5                                           | ( <sup>1</sup> )                                     | 84                               | +19                                          | -2                                                   | 88                                  | +14                                          | -2                                                   |
| 1912.....                      | 102                                | -2                                           | -3                                                   | 94                               | +6                                           | +12                                                  | 95                                  | +5                                           | +8                                                   |
| 1913.....                      | 102                                | -2                                           | ( <sup>1</sup> )                                     | 105                              | -5                                           | +12                                                  | 106                                 | -6                                           | +12                                                  |
| 1914.....                      | 100                                | ( <sup>1</sup> )                             | -2                                                   | 95                               | +5                                           | -10                                                  | 95                                  | -5                                           | -10                                                  |
| 1915.....                      | 100                                | .....                                        | ( <sup>1</sup> )                                     | 100                              | .....                                        | +5                                                   | 100                                 | .....                                        | +5                                                   |
| <b>Rollers:</b>                |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                      | 105                                | -5                                           | .....                                                | 91                               | +10                                          | .....                                                | 95                                  | +5                                           | .....                                                |
| 1911.....                      | 103                                | -3                                           | -2                                                   | 88                               | +14                                          | -3                                                   | 91                                  | +10                                          | -4                                                   |
| 1912.....                      | 101                                | -1                                           | -2                                                   | 98                               | +2                                           | +11                                                  | 98                                  | +2                                           | +8                                                   |
| 1913.....                      | 101                                | -1                                           | ( <sup>1</sup> )                                     | 109                              | -8                                           | +11                                                  | 109                                 | -8                                           | +11                                                  |
| 1914.....                      | 100                                | ( <sup>1</sup> )                             | -1                                                   | 98                               | +2                                           | -10                                                  | 98                                  | +2                                           | -10                                                  |
| 1915.....                      | 100                                | .....                                        | ( <sup>1</sup> )                                     | 100                              | .....                                        | +2                                                   | 100                                 | .....                                        | +2                                                   |
| <b>Manipulators:</b>           |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                      | 104                                | -4                                           | .....                                                | 88                               | +14                                          | .....                                                | 92                                  | +9                                           | .....                                                |
| 1911.....                      | 103                                | -3                                           | -1                                                   | 84                               | +19                                          | -5                                                   | 88                                  | +14                                          | -4                                                   |
| 1912.....                      | 101                                | -1                                           | -2                                                   | 94                               | +6                                           | +12                                                  | 94                                  | +6                                           | +7                                                   |
| 1913.....                      | 101                                | -1                                           | ( <sup>1</sup> )                                     | 105                              | -5                                           | +12                                                  | 104                                 | -4                                           | +11                                                  |
| 1914.....                      | 98                                 | +2                                           | -3                                                   | 94                               | +6                                           | -10                                                  | 93                                  | +8                                           | -11                                                  |
| 1915.....                      | 100                                | .....                                        | +2                                                   | 100                              | .....                                        | +6                                                   | 100                                 | .....                                        | +8                                                   |

<sup>1</sup> No change.

TABLE 26.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATIONS—BLOOMING MILLS—Concluded.

| Occupation and year.               | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|------------------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                                    | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in— |                                                      |
|                                    |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| <b>Table men:</b>                  |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                          | 102                                | -2                                           | .....                                                | 97                               | + 3                                          | .....                                                | 98                                  | + 2                                          | .....                                                |
| 1911.....                          | 101                                | -1                                           | -1                                                   | 91                               | +10                                          | -6                                                   | 92                                  | + 9                                          | -6                                                   |
| 1912.....                          | 101                                | -1                                           | (1)                                                  | 102                              | - 2                                          | +12                                                  | 103                                 | - 3                                          | +12                                                  |
| 1913.....                          | 101                                | -1                                           | (1)                                                  | 112                              | -11                                          | +10                                                  | 112                                 | -11                                          | + 9                                                  |
| 1914.....                          | 101                                | -1                                           | (1)                                                  | 96                               | + 4                                          | -14                                                  | 97                                  | + 3                                          | -13                                                  |
| 1915.....                          | 100                                | .....                                        | -1                                                   | 100                              | .....                                        | + 4                                                  | 100                                 | .....                                        | + 3                                                  |
| <b>Shearmen:</b>                   |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                          | 102                                | -2                                           | .....                                                | 87                               | +15                                          | .....                                                | 89                                  | +12                                          | .....                                                |
| 1911.....                          | 101                                | -1                                           | -1                                                   | 88                               | +14                                          | + 1                                                  | 90                                  | +11                                          | + 1                                                  |
| 1912.....                          | 101                                | -1                                           | (1)                                                  | 94                               | + 6                                          | + 7                                                  | 96                                  | + 4                                          | + 7                                                  |
| 1913.....                          | 101                                | -1                                           | (1)                                                  | 107                              | - 7                                          | +14                                                  | 108                                 | - 7                                          | +13                                                  |
| 1914.....                          | 99                                 | +1                                           | -2                                                   | 95                               | + 5                                          | -11                                                  | 95                                  | + 5                                          | -12                                                  |
| 1915.....                          | 100                                | .....                                        | +1                                                   | 100                              | .....                                        | + 5                                                  | 100                                 | .....                                        | + 5                                                  |
| <b>Shearmen's helpers:</b>         |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                          | 102                                | -2                                           | .....                                                | 87                               | +15                                          | .....                                                | 87                                  | +15                                          | .....                                                |
| 1911.....                          | 100                                | (1)                                          | -2                                                   | 87                               | +15                                          | (1)                                                  | 86                                  | +16                                          | - 1                                                  |
| 1912.....                          | 101                                | -1                                           | +1                                                   | 94                               | + 6                                          | + 8                                                  | 95                                  | + 5                                          | +10                                                  |
| 1913.....                          | 101                                | -1                                           | (1)                                                  | 108                              | - 6                                          | +13                                                  | 107                                 | - 7                                          | +13                                                  |
| 1914.....                          | 100                                | (1)                                          | -1                                                   | 99                               | + 1                                          | - 7                                                  | 99                                  | + 1                                          | - 7                                                  |
| 1915.....                          | 100                                | .....                                        | (1)                                                  | 100                              | .....                                        | + 1                                                  | 100                                 | .....                                        | + 1                                                  |
| <b>Laborers:</b>                   |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                          | 102                                | -2                                           | .....                                                | 87                               | +15                                          | .....                                                | 88                                  | +14                                          | .....                                                |
| 1911.....                          | 101                                | -1                                           | -1                                                   | 87                               | +15                                          | (1)                                                  | 88                                  | +14                                          | (1)                                                  |
| 1912.....                          | 102                                | -2                                           | +1                                                   | 88                               | +14                                          | + 1                                                  | 89                                  | +12                                          | + 1                                                  |
| 1913.....                          | 101                                | -1                                           | -1                                                   | 99                               | + 1                                          | +13                                                  | 100                                 | (1)                                          | +12                                                  |
| 1914.....                          | 99                                 | +1                                           | -2                                                   | 100                              | (1)                                          | + 1                                                  | 99                                  | + 1                                          | - 1                                                  |
| 1915.....                          | 100                                | .....                                        | +1                                                   | 100                              | .....                                        | (1)                                                  | 100                                 | .....                                        | + 1                                                  |
| <b>Unclassified—productive:</b>    |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1914.....                          | 99                                 | +1                                           | .....                                                | 101                              | - 1                                          | .....                                                | 100                                 | (1)                                          | .....                                                |
| 1915.....                          | 100                                | .....                                        | +1                                                   | 100                              | .....                                        | - 1                                                  | 100                                 | .....                                        | (1)                                                  |
| <b>Unclassified—nonproductive:</b> |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1914.....                          | 100                                | (1)                                          | .....                                                | 101                              | - 1                                          | .....                                                | 100                                 | (1)                                          | .....                                                |
| 1915.....                          | 100                                | .....                                        | (1)                                                  | 100                              | .....                                        | - 1                                                  | 100                                 | .....                                        | (1)                                                  |
| <b>All occupations:</b>            |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                          | 102                                | -2                                           | .....                                                | 88                               | +14                                          | .....                                                | 89                                  | +12                                          | .....                                                |
| 1911.....                          | 101                                | -1                                           | -1                                                   | 89                               | +12                                          | + 1                                                  | 90                                  | +11                                          | + 1                                                  |
| 1912.....                          | 101                                | -1                                           | (1)                                                  | 94                               | + 6                                          | + 6                                                  | 95                                  | + 5                                          | + 6                                                  |
| 1913.....                          | 101                                | -1                                           | (1)                                                  | 105                              | - 5                                          | +12                                                  | 105                                 | - 5                                          | +11                                                  |
| 1914.....                          | 99                                 | +1                                           | -2                                                   | 100                              | (1)                                          | - 5                                                  | 100                                 | (1)                                          | - 5                                                  |
| 1915.....                          | 100                                | .....                                        | +1                                                   | 100                              | .....                                        | (1)                                                  | 100                                 | .....                                        | (1)                                                  |

1 No change.

The relative full-time weekly earnings of all occupations combined in 1910 were 89 as compared with 100 in 1915. In other words, the full-time weekly earnings in 1910 were 89 per cent of such earnings in 1915. The relative increased to 90 in 1911, to 95 in 1912, to 105 in 1913, and decreased to 100 in 1914, and was unchanged in 1915, the base year. These relative numbers for all

years previous to 1914 are based on the principal productive occupations only, but those for 1914 and 1915 include the unclassified groups tabulated for 1914 and 1915 for the first time.

The next column shows that full-time weekly earnings in 1915 were 12 per cent higher than in 1910, 11 per cent higher than in 1911, 5 per cent higher than in 1912, 5 per cent lower than in 1913, and the same as in 1914.

The third column under "Weekly earnings" shows the per cent of increase or decrease in full-time weekly earnings each year as compared with the year immediately preceding. Thus the full-time weekly earnings in 1911 were 1 per cent higher than in 1910, in 1912 6 per cent higher than in 1911, in 1913 11 per cent higher than in 1912, in 1914 5 per cent lower than in 1913, and in 1915 there was no change as compared with 1914. The relative numbers and percentages for full-time hours per week and rates of wages per hour can be read in like manner.

#### **FULL-TIME WORKING DAYS PER WEEK.**

The number and per cent of employees in the principal productive occupations in blooming-mill plants whose customary working time per week was 5 days or turns, or 6 days, or 7 days, or variations thereof, are shown in Table 27. The heading "5 days and 6 days alternately" indicates that the plants were running 6 days and 5 nights each week, being shut down for one day and a half each week, and that the employees reported under this heading worked 6 days one week and 5 nights the next. The heading "6 days and 7 days alternately" indicates that the plants were not in operation half a day in each week, the employees reported working 6 turns one week and 7 turns the next week.

The figures are presented for each district and for the four districts combined.

Two sets of figures are given for the plants reporting for 1914 and 1915, the first covering only the principal productive occupations as shown for all preceding groups of years, and, therefore, strictly comparable with them, and the second including also the unclassified occupations (see pp. 55 and 56) tabulated for 1914 and 1915 for the first time.

For descriptions of occupations which appear in the tables of this chapter and of others included in the two unclassified groups see the Glossary of Occupations on pages 489 to 493.

# 212 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

**TABLE 27.—NUMBER AND PER CENT OF EMPLOYEES IN EACH DISTRICT WORKING EACH SPECIFIED NUMBER OF DAYS PER WEEK, BY YEARS, 1910 TO 1915—BLOOMING MILLS.**

[The figures for each group of years are for identical plants.]

| District, and number of plants. | Year. | Number of employees. | Number of employees whose customary working time per week was— |                                |         |                                |                                       |                                       | Per cent of employees whose customary working time per week was— |        |                                |        |                                |                                       |                                       |        |
|---------------------------------|-------|----------------------|----------------------------------------------------------------|--------------------------------|---------|--------------------------------|---------------------------------------|---------------------------------------|------------------------------------------------------------------|--------|--------------------------------|--------|--------------------------------|---------------------------------------|---------------------------------------|--------|
|                                 |       |                      | 5 days                                                         | 5 days and 6 days alternately. | 6 days. | 6 days and 7 days alternately. | 6 days 6 days and 7 days in rotation. | 6 days 7 days and 7 days in rotation. | 7 days                                                           | 5 days | 5 days and 6 days alternately. | 6 days | 6 days and 7 days alternately. | 6 days 6 days and 7 days in rotation. | 6 days 7 days and 7 days in rotation. | 7 days |
|                                 |       |                      |                                                                |                                |         |                                |                                       |                                       |                                                                  |        |                                |        |                                |                                       |                                       |        |
| Eastern:                        |       |                      |                                                                |                                |         |                                |                                       |                                       |                                                                  |        |                                |        |                                |                                       |                                       |        |
| 3 plants...                     | 1910  | 110                  | .....                                                          | 70                             | 6       | 25                             | .....                                 | 9                                     | .....                                                            | 64     | 6                              | 23     | .....                          | .....                                 | .....                                 | 8      |
|                                 | 1911  | 97                   | .....                                                          | 52                             | 10      | 22                             | .....                                 | 13                                    | .....                                                            | 54     | 10                             | 23     | .....                          | .....                                 | .....                                 | 13     |
|                                 | 1912  | 95                   | .....                                                          | 46                             | 14      | 22                             | .....                                 | 13                                    | .....                                                            | 48     | 15                             | 23     | .....                          | .....                                 | .....                                 | 14     |
| 3 plants...                     | 1912  | 99                   | .....                                                          | 48                             | 14      | 24                             | .....                                 | 13                                    | .....                                                            | 49     | 14                             | 24     | .....                          | .....                                 | .....                                 | 13     |
|                                 | 1913  | 100                  | .....                                                          | 50                             | 13      | 24                             | .....                                 | 13                                    | .....                                                            | 50     | 13                             | 24     | .....                          | .....                                 | .....                                 | 13     |
| 3 plants...                     | 1913  | 95                   | .....                                                          | 46                             | 12      | 24                             | .....                                 | 13                                    | .....                                                            | 48     | 13                             | 25     | .....                          | .....                                 | .....                                 | 14     |
|                                 | 1914  | 77                   | 27                                                             | 18                             | 1       | 24                             | .....                                 | 7                                     | 35                                                               | 23     | 1                              | 31     | .....                          | .....                                 | .....                                 | 9      |
| 3 plants...                     | 1914  | 94                   | 27                                                             | 18                             | 45      | .....                          | .....                                 | 4                                     | 29                                                               | 19     | 48                             | .....  | .....                          | .....                                 | .....                                 | 4      |
|                                 | 1915  | 86                   | 27                                                             | 10                             | 45      | .....                          | .....                                 | 4                                     | 31                                                               | 12     | 52                             | .....  | .....                          | .....                                 | .....                                 | 5      |
| 3 plants...                     | 1914  | 248                  | 42                                                             | 50                             | 128     | 10                             | .....                                 | 18                                    | 17                                                               | 20     | 52                             | 4      | .....                          | .....                                 | .....                                 | 7      |
|                                 | 1915  | 239                  | 52                                                             | 38                             | 118     | 11                             | .....                                 | 20                                    | 22                                                               | 16     | 49                             | 5      | .....                          | .....                                 | .....                                 | 8      |
| Pittsburgh:                     |       |                      |                                                                |                                |         |                                |                                       |                                       |                                                                  |        |                                |        |                                |                                       |                                       |        |
| 8 plants...                     | 1910  | 522                  | .....                                                          | .....                          | 426     | 83                             | .....                                 | 13                                    | .....                                                            | .....  | 82                             | 16     | .....                          | .....                                 | .....                                 | 3      |
|                                 | 1911  | 480                  | .....                                                          | .....                          | 355     | 86                             | .....                                 | 39                                    | .....                                                            | .....  | 74                             | 18     | .....                          | .....                                 | .....                                 | 8      |
|                                 | 1912  | 493                  | .....                                                          | .....                          | 354     | 92                             | .....                                 | 47                                    | .....                                                            | .....  | 72                             | 19     | .....                          | .....                                 | .....                                 | 10     |
| 8 plants...                     | 1912  | 474                  | .....                                                          | .....                          | 314     | 35                             | 72                                    | .....                                 | 53                                                               | .....  | 66                             | 7      | 15                             | .....                                 | .....                                 | 11     |
|                                 | 1913  | 482                  | .....                                                          | .....                          | 319     | 38                             | 72                                    | .....                                 | 53                                                               | .....  | 66                             | 8      | 15                             | .....                                 | .....                                 | 11     |
| 8 plants...                     | 1913  | 490                  | .....                                                          | .....                          | 303     | 64                             | 69                                    | 6                                     | 48                                                               | .....  | 62                             | 13     | 14                             | 1                                     | .....                                 | 10     |
|                                 | 1914  | 470                  | .....                                                          | .....                          | 330     | 51                             | 57                                    | 3                                     | 29                                                               | .....  | 70                             | 11     | 12                             | 1                                     | .....                                 | 6      |
| 10 plants...                    | 1914  | 524                  | .....                                                          | .....                          | 371     | 61                             | 60                                    | 3                                     | 29                                                               | .....  | 71                             | 12     | 11                             | 1                                     | .....                                 | 6      |
|                                 | 1915  | 546                  | .....                                                          | .....                          | 365     | 89                             | 60                                    | 3                                     | 29                                                               | .....  | 67                             | 16     | 11                             | 1                                     | .....                                 | 5      |
| 10 plants...                    | 1914  | 1,216                | .....                                                          | .....                          | 879     | 129                            | 69                                    | 3                                     | 136                                                              | .....  | 72                             | 11     | 6                              | (2)                                   | .....                                 | 11     |
|                                 | 1915  | 1,364                | .....                                                          | .....                          | 966     | 193                            | 69                                    | 3                                     | 133                                                              | .....  | 71                             | 14     | 5                              | (2)                                   | .....                                 | 10     |
| Great Lakes and Middle West:    |       |                      |                                                                |                                |         |                                |                                       |                                       |                                                                  |        |                                |        |                                |                                       |                                       |        |
| 6 plants...                     | 1910  | 346                  | .....                                                          | .....                          | 205     | 2                              | .....                                 | 139                                   | .....                                                            | .....  | 59                             | 1      | .....                          | .....                                 | .....                                 | 40     |
|                                 | 1911  | 296                  | .....                                                          | .....                          | 188     | 24                             | .....                                 | 84                                    | .....                                                            | .....  | 64                             | 8      | .....                          | .....                                 | .....                                 | 28     |
|                                 | 1912  | 328                  | .....                                                          | .....                          | 209     | 22                             | .....                                 | 97                                    | .....                                                            | .....  | 64                             | 7      | .....                          | .....                                 | .....                                 | 30     |
| 6 plants...                     | 1912  | 326                  | .....                                                          | .....                          | 207     | 24                             | .....                                 | 95                                    | .....                                                            | .....  | 64                             | 7      | .....                          | .....                                 | .....                                 | 29     |
|                                 | 1913  | 327                  | .....                                                          | .....                          | 234     | 44                             | .....                                 | 49                                    | .....                                                            | .....  | 72                             | 14     | .....                          | .....                                 | .....                                 | 15     |
| 6 plants...                     | 1913  | 360                  | .....                                                          | .....                          | 259     | 56                             | .....                                 | 45                                    | .....                                                            | .....  | 72                             | 16     | .....                          | .....                                 | .....                                 | 13     |
|                                 | 1914  | 278                  | .....                                                          | .....                          | 237     | 16                             | .....                                 | 18                                    | .....                                                            | .....  | 85                             | 6      | .....                          | 3                                     | .....                                 | 6      |
| 7 plants...                     | 1914  | 354                  | .....                                                          | .....                          | 307     | 16                             | 6                                     | 37                                    | 18                                                               | .....  | 87                             | 5      | 2                              | 2                                     | .....                                 | 5      |
|                                 | 1915  | 355                  | .....                                                          | .....                          | 293     | 20                             | 12                                    | 18                                    | 12                                                               | .....  | 83                             | 6      | 3                              | 5                                     | .....                                 | 3      |
| 7 plants...                     | 1914  | 744                  | .....                                                          | .....                          | 652     | 28                             | 6                                     | 37                                    | 51                                                               | .....  | 88                             | 4      | 1                              | 1                                     | .....                                 | 7      |
|                                 | 1915  | 792                  | .....                                                          | .....                          | 672     | 34                             | 12                                    | 18                                    | 56                                                               | .....  | 85                             | 4      | 2                              | 2                                     | .....                                 | 7      |
| Southern:                       |       |                      |                                                                |                                |         |                                |                                       |                                       |                                                                  |        |                                |        |                                |                                       |                                       |        |
| 2 plants...                     | 1910  | 86                   | .....                                                          | .....                          | 61      | .....                          | .....                                 | 25                                    | .....                                                            | .....  | 71                             | .....  | .....                          | .....                                 | .....                                 | 29     |
|                                 | 1911  | 75                   | 1                                                              | .....                          | 49      | 12                             | .....                                 | 13                                    | 1                                                                | .....  | 65                             | 16     | .....                          | .....                                 | .....                                 | 17     |
|                                 | 1912  | 72                   | 1                                                              | .....                          | 55      | 12                             | .....                                 | 4                                     | 1                                                                | .....  | 76                             | 17     | .....                          | .....                                 | .....                                 | 6      |
| 2 plants...                     | 1912  | 76                   | 1                                                              | .....                          | 57      | 14                             | .....                                 | 4                                     | 1                                                                | .....  | 75                             | 18     | .....                          | .....                                 | .....                                 | 5      |
|                                 | 1913  | 89                   | 1                                                              | .....                          | 69      | 14                             | .....                                 | 5                                     | 1                                                                | .....  | 78                             | 16     | .....                          | .....                                 | .....                                 | 6      |

<sup>1</sup> Including 9 employees who worked 7 days every ninth week and 6 employees who worked 7 days every sixth week.

<sup>2</sup> Less than one-half of 1 per cent.

<sup>3</sup> Five employees worked 6 days every fourth week and 2 employees worked 6 days for 3 weeks and 7 days for 5 weeks in each 8-week period.

<sup>4</sup> Including 9 employees who worked 7 days every ninth week.

<sup>5</sup> Fourteen employees worked 6 days every fourth week and 4 employees worked 6 days for 3 weeks and 7 days for 5 weeks in each 8-week period.



TABLE 27.—NUMBER AND PER CENT OF EMPLOYEES IN EACH DISTRICT WORKING EACH SPECIFIED NUMBER OF DAYS PER WEEK, BY YEARS, 1910 TO 1915—*BLOOMING MILLS*—Concluded.

| District, and number of plants.    | Year. | Number of employees. | Number of employees whose customary working time per week was— |                 |                                |                                |                                |         | Per cent of employees whose customary working time per week was— |         |                                |                                |                                |         |        |
|------------------------------------|-------|----------------------|----------------------------------------------------------------|-----------------|--------------------------------|--------------------------------|--------------------------------|---------|------------------------------------------------------------------|---------|--------------------------------|--------------------------------|--------------------------------|---------|--------|
|                                    |       |                      | 5 days and 6 days alternately.                                 | 6 days.         | 6 days and 7 days alternately. | 6 days and 7 days in rotation. | 6 days and 7 days in rotation. | 7 days. | 5 days and 6 days alternately.                                   | 6 days. | 6 days and 7 days alternately. | 6 days and 7 days in rotation. | 6 days and 7 days in rotation. | 7 days. |        |
|                                    |       |                      |                                                                |                 |                                |                                |                                |         |                                                                  |         |                                |                                |                                |         |        |
| Southern—Concluded.<br>2 plants... | 1913  | 74                   | .....                                                          | .....           | 66                             | 6                              | .....                          | 2       | .....                                                            | 89      | 8                              | .....                          | .....                          | 3       |        |
|                                    | 1914  | 67                   | .....                                                          | .....           | 61                             | 4                              | .....                          | 2       | .....                                                            | 91      | 6                              | .....                          | .....                          | 3       |        |
| 3 plants...                        | 1914  | 86                   | .....                                                          | .....           | 76                             | 5                              | .....                          | 5       | .....                                                            | 88      | 6                              | .....                          | .....                          | 6       |        |
|                                    | 1915  | 79                   | .....                                                          | .....           | 74                             | 1                              | .....                          | 4       | .....                                                            | 94      | 1                              | .....                          | .....                          | 5       |        |
| 3 plants...                        | 1914  | 268                  | .....                                                          | .....           | 184                            | 5                              | .....                          | 79      | .....                                                            | 69      | 2                              | .....                          | .....                          | 29      |        |
|                                    | 1915  | 264                  | .....                                                          | .....           | 174                            | 5                              | .....                          | 85      | .....                                                            | 66      | 2                              | .....                          | .....                          | 32      |        |
| Total:<br>19 plants..              | 1910  | 1,064                | .....                                                          | 70              | 698                            | 110                            | .....                          | 186     | .....                                                            | 7       | 66                             | 10                             | .....                          | 18      |        |
|                                    | 1911  | 948                  | 1                                                              | 52              | 602                            | 144                            | .....                          | 149     | (?)                                                              | 6       | 64                             | 15                             | .....                          | 16      |        |
|                                    | 1912  | 988                  | 1                                                              | 46              | 632                            | 148                            | .....                          | 161     | (1)                                                              | 5       | 64                             | 15                             | .....                          | 16      |        |
| 19 plants..                        | 1912  | 975                  | 1                                                              | 48              | 592                            | 97                             | 72                             | .....   | 165                                                              | (1)     | 5                              | 61                             | 10                             | .....   | 17     |
|                                    | 1913  | 998                  | 1                                                              | 50              | 635                            | 120                            | 72                             | .....   | 120                                                              | (1)     | 5                              | 64                             | 12                             | .....   | 12     |
| 19 plants..                        | 1913  | 1,019                | .....                                                          | 46              | 640                            | 150                            | 69                             | 6       | 108                                                              | .....   | 5                              | 63                             | 15                             | 7       | 11     |
|                                    | 1914  | 892                  | 27                                                             | 18              | 629                            | 95                             | 57                             | 2 10    | 56                                                               | 3       | 2                              | 71                             | 11                             | 6       | 6      |
| 23 plants..                        | 1914  | 1,058                | 27                                                             | 18              | <sup>3</sup> 799               | 82                             | 66                             | 2 10    | 56                                                               | 3       | 2                              | 76                             | 8                              | 6       | 1      |
|                                    | 1915  | 1,066                | 27                                                             | 10              | <sup>2</sup> 777               | 110                            | 72                             | 4 21    | 49                                                               | 3       | 1                              | 73                             | 10                             | 7       | 5      |
| 23 plants..                        | 1914  | 2,476                | 42                                                             | 50 <sup>3</sup> | 1,843                          | 172                            | 75                             | 2 21    | 284                                                              | 2       | 2                              | 74                             | 7                              | 3       | (1) 11 |
|                                    | 1915  | 2,659                | 52                                                             | 38 <sup>3</sup> | 1,930                          | 243                            | 81                             | 4 21    | 294                                                              | 2       | 1                              | 73                             | 9                              | 3       | 1 11   |

<sup>1</sup> Less than one-half of 1 per cent.<sup>2</sup> Including 5 employees who worked 6 days every fourth week and 2 employees who worked 6 days for 3 weeks and 7 days for 5 weeks in each 8-week period.<sup>3</sup> Including 18 employees who worked 7 days every ninth week and 6 employees who worked 7 days every sixth week.<sup>4</sup> Including 14 employees who worked 6 days every fourth week and 4 employees who worked 6 days for 3 weeks and 7 days for 5 weeks in each 8-week period.

Two general tables are presented for the blooming-mill department, as follows:

Table I.—Full-time hours per week, rates of wages per hour, and full-time weekly earnings, in the United States, by years 1910 to 1915.

Table J.—Full-time hours per week, rates of wages per hour, and full-time weekly earnings in each district, by years, 1913 to 1915.

The data from Table I are summarized in Table 25.

The order in which the occupations are given in Tables I and J, and in the table of relative numbers, follows that of the processes of manufacture. "Identical plants," as used in the tables of this report, are identical units of identical establishments, reporting the same occupations in each of two or more consecutive years. For a more extended explanation see page 58.

Figures for each geographical division for each preceding year, back to 1910, corresponding to those given for 1913, 1914, and 1915 in Table J, were given in Bulletins No. 151 and No. 168.

TABLE I.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1910 TO 1915—

[The figures for each group of

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Pit cranimen:                     | 1910  | 99                   | 69.6                              | \$0.315                         | \$21.41                            | 18                                             | 18                   | 11              | 50 | 4                    | 16 |                      |    |
| 2        | 18 plants.....                    | 1911  | 95                   | 68.8                              | .309                            | 21.01                              | 18                                             | 18                   | 14              | 47 | 6                    | 10 |                      |    |
| 3        |                                   | 1912  | 97                   | 68.7                              | .328                            | 22.33                              | 18                                             | 18                   | 18              | 45 | 6                    | 10 |                      |    |
| 4        | 19 plants.....                    | 1912  | 95                   | 71.6                              | .319                            | 22.63                              | 6                                              | 18                   | 45              | 16 | 10                   |    |                      |    |
| 5        |                                   | 1913  | 99                   | 71.4                              | .373                            | 26.48                              | 6                                              | 14                   | 54              | 20 | 5                    |    |                      |    |
| 6        | 19 plants.....                    | 1913  | 115                  | 69.3                              | .369                            | 25.39                              | 18                                             | 12                   | 14              | 60 | 18                   | 5  |                      |    |
| 7        |                                   | 1914  | 105                  | 69.0                              | .337                            | 23.04                              | 12                                             | 4                    | 14              | 51 | 20                   | 4  |                      |    |
| 8        | 23 plants.....                    | 1914  | 124                  | 66.6                              | .357                            | 23.29                              | 21                                             | 4                    | 14              | 55 | 20                   | 4  |                      |    |
| 9        |                                   | 1915  | 119                  | 66.7                              | .375                            | 24.44                              | 6                                              | 4                    | 6               | 52 | 26                   | 1  |                      |    |
| 10       | Heaters:                          |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 11       | 19 plants.....                    | 1910  | 51                   | 73.4                              | .521                            | 37.88                              | 3                                              | 2                    | 31              | 4  | 11                   |    |                      |    |
| 12       |                                   | 1911  | 49                   | 73.3                              | .512                            | 37.59                              | 3                                              | 1                    | 4               | 25 | 6                    | 10 |                      |    |
| 13       |                                   | 1912  | 53                   | 73.0                              | .556                            | 40.42                              | 3                                              | 1                    | 4               | 31 | 4                    | 10 |                      |    |
| 14       | 19 plants.....                    | 1912  | 55                   | 72.9                              | .552                            | 40.14                              | 3                                              | 1                    | 4               | 33 | 4                    | 10 |                      |    |
| 15       |                                   | 1913  | 53                   | 73.2                              | .604                            | 44.18                              | 3                                              | 1                    | 4               | 27 | 8                    | 10 |                      |    |
| 16       | 19 plants.....                    | 1913  | 79                   | 71.2                              | .594                            | 41.86                              | 15                                             | 4                    | 30              | 18 | 12                   |    |                      |    |
| 17       |                                   | 1914  | 77                   | 70.7                              | .513                            | 36.12                              | 15                                             | 2                    | 1               | 33 | 16                   | 10 |                      |    |
| 18       | 23 plants.....                    | 1914  | 89                   | 69.3                              | .542                            | 37.93                              | 21                                             | 2                    | 1               | 41 | 14                   | 10 |                      |    |
| 19       |                                   | 1915  | 84                   | 69.9                              | .584                            | 40.06                              | 18                                             | 2                    | 1               | 35 | 20                   | 8  |                      |    |
| 20       | Heaters' helpers:                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 21       | 11 plants.....                    | 1910  | 34                   | 73.4                              | .344                            | 24.62                              | 3                                              | 4                    | 12              | 9  | 6                    |    |                      |    |
| 22       |                                   | 1911  | 34                   | 73.5                              | .363                            | 26.71                              | 3                                              | 4                    | 12              | 6  | 9                    |    |                      |    |
| 23       |                                   | 1912  | 34                   | 73.5                              | .354                            | 25.58                              | 3                                              | 4                    | 12              | 6  | 9                    |    |                      |    |
| 24       | 11 plants.....                    | 1912  | 50                   | 67.9                              | .352                            | 23.63                              | 15                                             | 4                    | 16              | 6  | 9                    |    |                      |    |
| 25       |                                   | 1913  | 52                   | 67.2                              | .390                            | 26.01                              | 15                                             | 4                    | 20              | 8  | 5                    |    |                      |    |
| 26       | 10 plants.....                    | 1913  | 52                   | 64.6                              | .359                            | 22.76                              | 21                                             | 4                    | 10              | 16 | 1                    |    |                      |    |
| 27       |                                   | 1914  | 43                   | 64.0                              | .337                            | 20.95                              | 3                                              | 4                    | 6               | 14 | 1                    |    |                      |    |
| 28       | 10 plants.....                    | 1914  | 39                   | 62.4                              | .355                            | 21.50                              | 18                                             | 4                    | 8               | 8  | 1                    |    |                      |    |
| 29       |                                   | 1915  | 39                   | 62.1                              | .369                            | 22.48                              | 18                                             | 4                    | 10              | 6  | 1                    |    |                      |    |
| 30       | Bottom makers:                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 31       | 16 plants.....                    | 1910  | 60                   | 70.5                              | .335                            | 23.26                              | 6                                              | 2                    | 48              | 4  |                      |    |                      |    |
| 32       |                                   | 1911  | 55                   | 70.8                              | .331                            | 23.24                              | 6                                              | 3                    | 37              | 5  | 4                    |    |                      |    |
| 33       |                                   | 1912  | 58                   | 70.9                              | .347                            | 24.44                              | 6                                              | 3                    | 40              | 5  | 4                    |    |                      |    |
| 34       | 15 plants.....                    | 1912  | 56                   | 71.4                              | .346                            | 24.50                              | 6                                              | 2                    | 36              | 6  | 6                    |    |                      |    |
| 35       |                                   | 1913  | 60                   | 71.4                              | .384                            | 27.28                              | 6                                              | 4                    | 36              | 8  | 6                    |    |                      |    |
| 36       | 15 plants.....                    | 1913  | 62                   | 71.9                              | .367                            | 26.32                              | 6                                              | 4                    | 30              | 16 | 6                    |    |                      |    |
| 37       |                                   | 1914  | 60                   | 71.8                              | .347                            | 24.70                              | 6                                              | 4                    | 27              | 19 | 4                    |    |                      |    |
| 38       | 20 plants.....                    | 1914  | 79                   | 68.6                              | .370                            | 24.68                              | 3                                              | 15                   | 31              | 22 | 4                    |    |                      |    |
| 39       |                                   | 1915  | 76                   | 68.5                              | .389                            | 25.77                              | 3                                              | 15                   | 2               | 29 | 25                   | 2  |                      |    |
| 40       | Bottom makers' help-              |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 41       | ers:                              |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 42       | 12 plants.....                    | 1910  | 47                   | 70.3                              | .251                            | 17.23                              | 6                                              | 3                    | 37              | 4  |                      |    |                      |    |
| 43       |                                   | 1911  | 46                   | 70.3                              | .243                            | 16.83                              | 6                                              | 3                    | 30              | 5  | 2                    |    |                      |    |
| 44       |                                   | 1912  | 46                   | 70.4                              | .257                            | 17.84                              | 6                                              | 3                    | 28              | 7  | 2                    |    |                      |    |
| 45       | 13 plants.....                    | 1912  | 50                   | 70.6                              | .257                            | 17.95                              | 6                                              | 3                    | 30              | 12 | 2                    |    |                      |    |
| 46       |                                   | 1913  | 55                   | 70.8                              | .276                            | 19.33                              | 6                                              | 3                    | 31              | 14 | 4                    |    |                      |    |
| 47       | 13 plants.....                    | 1913  | 65                   | 72.0                              | .263                            | 18.72                              | 6                                              | 3                    | 33              | 20 | 6                    |    |                      |    |
| 48       |                                   | 1914  | 56                   | 71.3                              | .258                            | 18.14                              | 6                                              | 3                    | 27              | 20 | 3                    |    |                      |    |
| 49       | 17 plants.....                    | 1914  | 70                   | 69.8                              | .273                            | 18.45                              | 6                                              | 6                    | 31              | 24 | 3                    |    |                      |    |
| 50       |                                   | 1915  | 76                   | 70.5                              | .269                            | 18.46                              | 6                                              | 6                    | 1               | 29 | 30                   | 4  |                      |    |

years are for identical plants.)

[illegible]

TABLE I.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1910 TO 1915—

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |       |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|-------|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84    |
| 1        | Roll engineers:                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |       |
| 2        | 18 plants.....                    | 1910  | 42                   | 70.9                              | \$0.392                         | \$27.12                            | 3                                              | 3                    | .....           |    | 4                    | 19 | 7                    | 6     |
| 3        |                                   | 1911  | 40                   | 70.9                              | .385                            | 26.66                              | 3                                              | 3                    | .....           |    | 5                    | 15 | 8                    | 6     |
|          |                                   | 1912  | 41                   | 69.2                              | .428                            | 28.65                              | 6                                              | 3                    | .....           |    | 5                    | 13 | 8                    | 6     |
| 4        | 19 plants.....                    | 1912  | 46                   | 68.4                              | .437                            | 28.79                              | 6                                              | 6                    | .....           |    | 4                    | 11 | 15                   | 4     |
| 5        |                                   | 1913  | 46                   | 68.0                              | .491                            | 32.04                              | 6                                              | 6                    | .....           |    | 4                    | 13 | 15                   | 2     |
| 6        | 19 plants.....                    | 1913  | 52                   | 68.5                              | .471                            | 30.96                              | 6                                              | 6                    | .....           |    | 4                    | 19 | 15                   | 2     |
| 7        |                                   | 1914  | 52                   | 67.5                              | .425                            | 27.81                              | 6                                              | 6                    | 2               |    | 2                    | 23 | 11                   | 2     |
| 8        | 23 plants.....                    | 1914  | 60                   | 65.6                              | .447                            | 28.30                              | 12                                             | 6                    | 2               |    | 2                    | 26 | 10                   | 2     |
| 9        |                                   | 1915  | 59                   | 65.4                              | .471                            | 29.81                              | 12                                             | 6                    | 2               |    | 1                    | 27 | 9                    | 2     |
| 10       | Rollers:                          |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |       |
| 11       | 18 plants.....                    | 1910  | 46                   | 67.6                              | .605                            | 40.00                              | 6                                              | 3                    | .....           |    | 5                    | 29 | .....                | 3     |
| 12       |                                   | 1911  | 41                   | 66.6                              | .585                            | 38.49                              | 3                                              | 6                    | .....           |    | 6                    | 24 | 2                    | ..... |
|          |                                   | 1912  | 42                   | 65.0                              | .652                            | 41.41                              | 6                                              | 6                    | .....           |    | 6                    | 22 | 2                    | ..... |
| 13       | 10 plants.....                    | 1912  | 46                   | 65.9                              | .632                            | 40.53                              | 6                                              | 6                    | .....           |    | 6                    | 24 | 4                    | ..... |
| 14       |                                   | 1913  | 46                   | 66.2                              | .703                            | 45.11                              | 6                                              | 6                    | .....           |    | 6                    | 22 | 6                    | ..... |
| 15       | 19 plants.....                    | 1913  | 46                   | 66.2                              | .701                            | 44.98                              | 6                                              | 6                    | .....           |    | 6                    | 22 | 6                    | ..... |
| 16       |                                   | 1914  | 46                   | 65.5                              | .632                            | 40.51                              | 6                                              | 6                    | 2               |    | 3                    | 27 | 2                    | ..... |
| 17       | 23 plants.....                    | 1914  | 54                   | 63.6                              | .684                            | 42.41                              | 9                                              | 9                    | 2               |    | 3                    | 31 | .....                | ..... |
| 18       |                                   | 1915  | 53                   | 63.5                              | .697                            | 43.26                              | 9                                              | 9                    | 2               |    | 2                    | 31 | .....                | ..... |
| 19       | Manipulators:                     |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |       |
| 20       | 19 plants.....                    | 1910  | 52                   | 68.4                              | .365                            | 24.21                              | 6                                              | 3                    | .....           |    | 7                    | 29 | 3                    | 4     |
| 21       |                                   | 1911  | 48                   | 67.9                              | .350                            | 23.26                              | 3                                              | 6                    | .....           |    | 8                    | 24 | 5                    | 2     |
|          |                                   | 1912  | 47                   | 66.6                              | .390                            | 24.94                              | 6                                              | 6                    | .....           |    | 6                    | 22 | 5                    | 2     |
| 22       | 19 plants.....                    | 1912  | 49                   | 66.8                              | .388                            | 24.92                              | 6                                              | 6                    | .....           |    | 6                    | 24 | 5                    | 2     |
| 23       |                                   | 1913  | 51                   | 66.5                              | .432                            | 27.60                              | 6                                              | 6                    | .....           |    | 8                    | 24 | 7                    | ..... |
| 24       | 19 plants.....                    | 1913  | 60                   | 65.3                              | .431                            | 26.86                              | 6                                              | 12                   | .....           |    | 8                    | 25 | 9                    | ..... |
| 25       |                                   | 1914  | 54                   | 63.8                              | .386                            | 23.89                              | 12                                             | 6                    | 2               |    | 3                    | 29 | 2                    | ..... |
| 26       | 23 plants.....                    | 1914  | 62                   | 62.4                              | .394                            | 23.95                              | 12                                             | 12                   | 2               |    | 3                    | 33 | .....                | ..... |
| 27       |                                   | 1915  | 60                   | 63.4                              | .420                            | 25.81                              | 9                                              | 12                   | 2               |    | 2                    | 35 | .....                | ..... |
| 28       | Table men:                        |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |       |
| 29       | 13 plants.....                    | 1910  | 36                   | 69.3                              | .271                            | 18.03                              | 3                                              | 3                    | .....           |    | 4                    | 20 | 2                    | 4     |
| 30       |                                   | 1911  | 35                   | 68.7                              | .254                            | 17.05                              | .....                                          | 6                    | .....           |    | 6                    | 17 | 4                    | 2     |
|          |                                   | 1912  | 35                   | 68.7                              | .285                            | 19.00                              | .....                                          | 6                    | .....           |    | 6                    | 17 | 4                    | 2     |
| 31       | 12 plants.....                    | 1912  | 33                   | 68.5                              | .290                            | 19.24                              | .....                                          | 6                    | .....           |    | 6                    | 15 | 4                    | 2     |
| 32       |                                   | 1913  | 31                   | 68.0                              | .316                            | 20.95                              | .....                                          | 6                    | .....           |    | 4                    | 17 | 4                    | ..... |
| 33       | 11 plants.....                    | 1913  | 29                   | 67.3                              | .322                            | 21.14                              | .....                                          | 6                    | .....           |    | 4                    | 17 | 2                    | ..... |
| 34       |                                   | 1914  | 31                   | 67.4                              | .277                            | 18.34                              | .....                                          | 6                    | 2               |    | 1                    | 20 | 2                    | ..... |
| 35       | 14 plants.....                    | 1914  | 36                   | 63.6                              | .314                            | 19.36                              | 6                                              | 6                    | 2               |    | 1                    | 21 | .....                | ..... |
| 36       |                                   | 1915  | 34                   | 63.1                              | .327                            | 19.94                              | 6                                              | 6                    | 2               |    | 1                    | 19 | .....                | ..... |
| 37       | Shearmen:                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |       |
| 38       | 19 plants.....                    | 1910  | 48                   | 70.0                              | .303                            | 20.85                              | 3                                              | 3                    | .....           |    | 4                    | 28 | 6                    | 4     |
| 39       |                                   | 1911  | 46                   | 69.4                              | .306                            | 20.96                              | 3                                              | 3                    | .....           |    | 6                    | 28 | 4                    | 2     |
|          |                                   | 1912  | 46                   | 69.5                              | .328                            | 22.39                              | 3                                              | 3                    | .....           |    | 6                    | 28 | 4                    | 2     |
| 40       | 19 plants.....                    | 1912  | 52                   | 69.8                              | .319                            | 21.93                              | 3                                              | 3                    | .....           |    | 6                    | 34 | 4                    | 2     |
| 41       |                                   | 1913  | 52                   | 69.6                              | .363                            | 24.80                              | 3                                              | 3                    | .....           |    | 6                    | 30 | 10                   | ..... |
| 42       | 19 plants.....                    | 1913  | 56                   | 67.2                              | .370                            | 24.23                              | 9                                              | 3                    | .....           |    | 6                    | 28 | 10                   | ..... |
| 43       |                                   | 1914  | 58                   | 65.6                              | .329                            | 21.16                              | 6                                              | 9                    | 2               |    | 3                    | 36 | 2                    | ..... |
| 44       | 23 plants.....                    | 1914  | 65                   | 65.0                              | .345                            | 21.84                              | 9                                              | 9                    | 2               |    | 5                    | 40 | .....                | ..... |
| 45       |                                   | 1915  | 62                   | 65.9                              | .362                            | 23.09                              | 6                                              | 9                    | 2               |    | 4                    | 41 | .....                | ..... |

AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
BLOOMING MILLS—Continued.

| Employees whose rates of wages per hour were— |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | Line<br>No. |
|-----------------------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------|-------------|
| 12 and<br>under<br>14<br>cents.               | 14 and<br>under<br>16<br>cents. | 16 and<br>under<br>18<br>cents. | 18 and<br>under<br>20<br>cents. | 20 and<br>under<br>25<br>cents. | 25 and<br>under<br>30<br>cents. | 30 and<br>under<br>40<br>cents. | 40 and<br>under<br>50<br>cents. | 50 and<br>under<br>60<br>cents. | 60 and<br>under<br>70<br>cents. | 70 cents<br>and<br>over. |             |
|                                               |                                 |                                 |                                 |                                 | 5                               | 17                              | 15                              | 2                               | 3                               |                          | 1           |
|                                               |                                 |                                 |                                 |                                 | 4                               | 23                              | 7                               | 6                               |                                 |                          | 2           |
|                                               |                                 |                                 |                                 |                                 |                                 | 24                              | 2                               | 13                              | 2                               |                          | 3           |
|                                               |                                 |                                 |                                 |                                 | 2                               | 24                              | 2                               | 13                              | 5                               |                          | 4           |
|                                               |                                 |                                 |                                 |                                 |                                 | 17                              | 8                               | 7                               | 11                              | 3                        | 5           |
|                                               |                                 |                                 |                                 |                                 |                                 | 23                              | 8                               | 7                               | 11                              | 3                        | 6           |
|                                               |                                 |                                 |                                 |                                 | 2                               | 26                              | 12                              | 7                               | 5                               |                          | 7           |
|                                               |                                 |                                 |                                 |                                 | 2                               | 26                              | 13                              | 11                              | 7                               |                          | 8           |
|                                               |                                 |                                 |                                 |                                 |                                 | 23                              | 13                              | 12                              | 9                               | 2                        | 9           |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 16                              | 11                              | 11                              | 8                        | 10          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 11                              | 13                              | 12                              | 5                        | 11          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 7                               | 13                              | 7                               | 15                       | 12          |
|                                               |                                 |                                 |                                 |                                 |                                 | 2                               | 9                               | 13                              | 7                               | 15                       | 13          |
|                                               |                                 |                                 |                                 |                                 |                                 | 2                               | 4                               | 11                              | 9                               | 20                       | 14          |
|                                               |                                 |                                 |                                 |                                 |                                 | 2                               | 4                               | 11                              | 9                               | 20                       | 15          |
|                                               |                                 |                                 |                                 |                                 |                                 | 2                               | 8                               | 9                               | 13                              | 14                       | 16          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 9                               | 11                              | 15                              | 19                       | 17          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 6                               | 12                              | 13                              | 22                       | 18          |
|                                               |                                 |                                 |                                 | 4                               | 16                              | 15                              | 12                              | 2                               | 3                               |                          | 19          |
|                                               |                                 |                                 |                                 | 5                               | 14                              | 13                              | 13                              | 3                               |                                 |                          | 20          |
|                                               |                                 |                                 |                                 | 3                               | 10                              | 14                              | 11                              | 4                               | 5                               |                          | 21          |
|                                               |                                 |                                 |                                 | 3                               | 10                              | 16                              | 11                              | 4                               | 5                               |                          | 22          |
|                                               |                                 |                                 |                                 | 3                               | 5                               | 19                              | 11                              | 4                               | 6                               | 3                        | 23          |
|                                               |                                 |                                 |                                 | 6                               | 5                               | 19                              | 13                              | 8                               | 6                               | 3                        | 24          |
|                                               |                                 |                                 |                                 | 2                               | 10                              | 20                              | 16                              | 3                               | 3                               |                          | 25          |
|                                               |                                 |                                 |                                 | 2                               | 9                               | 21                              | 2                               | 3                               | 3                               |                          | 26          |
|                                               |                                 |                                 |                                 | 2                               | 7                               | 17                              | 20                              | 11                              | 1                               | 2                        | 27          |
|                                               |                                 | 6                               |                                 | 10                              | 10                              | 7                               |                                 | 3                               |                                 |                          | 28          |
|                                               |                                 | 6                               | 2                               | 9                               | 9                               | 9                               |                                 |                                 |                                 |                          | 29          |
|                                               |                                 | 4                               | 1                               | 8                               | 8                               | 11                              | 3                               |                                 |                                 |                          | 30          |
|                                               |                                 | 4                               |                                 | 7                               | 8                               | 11                              | 3                               |                                 |                                 |                          | 31          |
|                                               |                                 | 2                               |                                 | 10                              | 2                               | 10                              | 4                               | 3                               |                                 |                          | 32          |
|                                               |                                 | 2                               |                                 | 8                               | 2                               | 10                              | 4                               | 3                               |                                 |                          | 33          |
|                                               |                                 | 2                               |                                 | 9                               | 6                               | 14                              |                                 |                                 |                                 |                          | 34          |
|                                               |                                 | 2                               |                                 | 8                               | 4                               | 15                              | 7                               |                                 |                                 |                          | 35          |
|                                               |                                 | 2                               |                                 | 8                               | 3                               | 13                              | 6                               | 2                               |                                 |                          | 36          |
|                                               |                                 |                                 |                                 | 11                              | 13                              | 21                              |                                 | 3                               |                                 |                          | 37          |
|                                               |                                 |                                 | 4                               | 7                               | 7                               | 23                              | 5                               |                                 |                                 |                          | 38          |
|                                               |                                 |                                 |                                 | 7                               | 8                               | 21                              | 8                               | 2                               |                                 |                          | 39          |
|                                               |                                 |                                 | 2                               | 9                               | 8                               | 23                              | 8                               | 2                               |                                 |                          | 40          |
|                                               |                                 |                                 |                                 | 11                              | 5                               | 19                              | 11                              | 6                               |                                 |                          | 41          |
|                                               |                                 |                                 |                                 | 11                              | 5                               | 19                              | 15                              | 6                               |                                 |                          | 42          |
|                                               |                                 |                                 |                                 | 12                              | 8                               | 28                              | 7                               | 3                               |                                 |                          | 43          |
|                                               |                                 |                                 |                                 | 13                              | 9                               | 26                              | 11                              | 3                               | 3                               |                          | 44          |
|                                               |                                 |                                 |                                 | 13                              | 8                               | 19                              | 12                              | 8                               | 2                               |                          | 45          |

TABLE I.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1910 TO 1915—

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |       |                      |     |                      |       |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-------|----------------------|-----|----------------------|-------|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60    | Over 60 and under 72 | 72  | Over 72 and under 84 | 84    |
| 1        | Shearmen's helpers:               | 1910  | 100                  | 70.9                              | \$0.218                         | \$15.15                            | 3                                              | 9                    | .....           | ..... | 8                    | 56  | 10                   | 14    |
| 2        | 18 plants.....                    | 1911  | 96                   | 69.5                              | .217                            | 14.90                              | 3                                              | 9                    | .....           | ..... | 14                   | 56  | 12                   | 2     |
| 3        |                                   | 1912  | 93                   | 70.1                              | .237                            | 16.44                              | .....                                          | 9                    | .....           | ..... | 14                   | 58  | 10                   | 2     |
| 4        | 18 plants.....                    | 1912  | 99                   | 70.2                              | .230                            | 15.93                              | .....                                          | 9                    | .....           | ..... | 14                   | 64  | 10                   | 2     |
| 5        |                                   | 1913  | 101                  | 70.5                              | .259                            | 18.07                              | .....                                          | 9                    | .....           | ..... | 12                   | 56  | 24                   | ..... |
| 6        | 18 plants.....                    | 1913  | 111                  | 69.5                              | .267                            | 18.17                              | 6                                              | 9                    | .....           | ..... | 10                   | 62  | 24                   | ..... |
| 7        |                                   | 1914  | 98                   | 68.7                              | .249                            | 16.83                              | .....                                          | 12                   | .....           | 6     | 2                    | 76  | 2                    | ..... |
| 8        | 20 plants.....                    | 1914  | 113                  | 68.4                              | .256                            | 17.23                              | 3                                              | 12                   | .....           | 6     | 2                    | 90  | .....                | ..... |
| 9        |                                   | 1915  | 114                  | 68.5                              | .258                            | 17.35                              | 3                                              | 12                   | .....           | 6     | 2                    | 89  | 2                    | ..... |
| 10       | Laborers:                         | 1910  | 449                  | 74.1                              | .162                            | 11.97                              | .....                                          | 3                    | .....           | 11    | 59                   | 242 | 25                   | 109   |
| 11       | 19 plants.....                    | 1911  | 363                  | 73.7                              | .163                            | 12.02                              | .....                                          | 4                    | .....           | 14    | 34                   | 214 | 32                   | 65    |
| 12       |                                   | 1912  | 396                  | 73.8                              | .164                            | 12.13                              | .....                                          | 6                    | .....           | 12    | 38                   | 224 | 44                   | 72    |
| 13       | 19 plants.....                    | 1912  | 344                  | 74.0                              | .163                            | 12.08                              | .....                                          | 6                    | .....           | 12    | 38                   | 172 | 44                   | 72    |
| 14       |                                   | 1913  | 352                  | 73.4                              | .184                            | 13.53                              | .....                                          | 4                    | .....           | 9     | 57                   | 190 | 41                   | 51    |
| 15       | 19 plants.....                    | 1913  | 292                  | 73.1                              | .185                            | 13.51                              | .....                                          | 3                    | .....           | 9     | 58                   | 146 | 43                   | 33    |
| 16       |                                   | 1914  | 212                  | 72.0                              | .187                            | 13.44                              | 1                                              | .....                | 2               | 47    | 140                  | 14  | 8                    | ..... |
| 17       | 22 plants.....                    | 1914  | 267                  | 71.7                              | .187                            | 13.39                              | 1                                              | .....                | .....           | 11    | 45                   | 185 | 14                   | 11    |
| 18       |                                   | 1915  | 290                  | 72.3                              | .187                            | 13.49                              | 1                                              | .....                | .....           | 5     | 47                   | 192 | 37                   | 8     |
| 19       | Unclassified—productive:          | 1914  | 445                  | 72.0                              | .220                            | 15.75                              | 1                                              | 13                   | .....           | 20    | 30                   | 283 | 53                   | 45    |
| 20       | 23 plants.....                    | 1915  | 481                  | 72.6                              | .219                            | 15.81                              | .....                                          | 12                   | .....           | 21    | 30                   | 291 | 80                   | 47    |
| 21       | Unclassified—nonproductive:       | 1914  | 973                  | 72.7                              | .219                            | 15.92                              | 6                                              | 15                   | 16              | 57    | 79                   | 577 | 69                   | 154   |
| 22       | 22 plants.....                    | 1915  | 1,112                | 72.8                              | .218                            | 15.86                              | 3                                              | 26                   | 8               | 59    | 97                   | 661 | 87                   | 171   |

<sup>1</sup> Including 3 whose full-time hours per week were 91.

AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
BLOOMING MILLS—Concluded.

| Employees whose rates of wages per hour were— |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | Line<br>No. |
|-----------------------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------|-------------|
| 12 and<br>under<br>14<br>cents.               | 14 and<br>under<br>16<br>cents. | 16 and<br>under<br>18<br>cents. | 18 and<br>under<br>20<br>cents. | 20 and<br>under<br>25<br>cents. | 25 and<br>under<br>30<br>cents. | 30 and<br>under<br>40<br>cents. | 40 and<br>under<br>50<br>cents. | 50 and<br>under<br>60<br>cents. | 60 and<br>under<br>70<br>cents. | 70 cents<br>and<br>over. |             |
|                                               | 14                              | 18                              | 17                              | 26                              | 16                              | 9                               |                                 |                                 |                                 |                          | 1           |
| 1                                             | 12                              | 17                              | 8                               | 29                              | 26                              | 3                               |                                 |                                 |                                 |                          | 2           |
|                                               | 1                               | 20                              | 9                               | 27                              | 19                              | 17                              |                                 |                                 |                                 |                          | 3           |
|                                               | 3                               | 24                              | 9                               | 29                              | 19                              | 15                              |                                 |                                 |                                 |                          | 4           |
|                                               | 1                               | 12                              | 14                              | 20                              | 28                              | 25                              | 1                               |                                 |                                 |                          | 5           |
|                                               | 1                               | 12                              | 18                              | 18                              | 30                              | 25                              | 7                               |                                 |                                 |                          | 6           |
|                                               |                                 | 8                               | 12                              | 35                              | 23                              | 20                              |                                 |                                 |                                 |                          | 7           |
|                                               |                                 | 8                               | 14                              | 33                              | 29                              | 29                              |                                 |                                 |                                 |                          | 8           |
|                                               |                                 | 10                              | 19                              | 28                              | 24                              | 30                              | 3                               |                                 |                                 |                          | 9           |
| 45                                            | 60                              | 344                             |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | 10          |
| 45                                            | 30                              | 288                             |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | 11          |
| 41                                            | 3                               | 352                             |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | 12          |
| 41                                            | 5                               | 298                             |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | 13          |
| 9                                             | 34                              | 62                              | 192                             | 55                              |                                 |                                 |                                 |                                 |                                 |                          | 14          |
| 8                                             | 20                              | 64                              | 158                             | 42                              |                                 |                                 |                                 |                                 |                                 |                          | 15          |
| 8                                             | 7                               | 43                              | 122                             | 32                              |                                 |                                 |                                 |                                 |                                 |                          | 16          |
| 8                                             | 7                               | 55                              | 162                             | 35                              |                                 |                                 |                                 |                                 |                                 |                          | 17          |
| 7                                             | 18                              | 45                              | 182                             | 38                              |                                 |                                 |                                 |                                 |                                 |                          | 18          |
|                                               | 13                              | 27                              | 107                             | 219                             | 52                              | 23                              | 4                               |                                 |                                 |                          | 19          |
|                                               | 20                              | 42                              | 126                             | 205                             | 53                              | 27                              | 8                               |                                 |                                 |                          | 20          |
| 1                                             | 16                              | 50                              | 207                             | 512                             | 111                             | 70                              | 6                               |                                 |                                 |                          | 21          |
|                                               | 19                              | 101                             | 172                             | 605                             | 127                             | 80                              | 8                               |                                 |                                 |                          | 22          |

\*Including 2 whose full-time hours per week were 91.

TABLE J.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, 1913 TO 1915—

[The abbreviation "G. L. and M. W." stands for "Great Lakes and

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                       |                  |     |                       |     |                       |     |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|-----------------------|------------------|-----|-----------------------|-----|-----------------------|-----|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56. | 56 and under 60. | 60. | Over 60 and under 72. | 72. | Over 72 and under 84. | 84. |
|          | Pit cranimen: Eastern—                      |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 1        | 3 plants.....                               | 1913  | 14                   | 68.7                              | \$0.326                         | \$21.94                            |                                                |                       |                  |     | 10                    |     | 4                     |     |
| 2        |                                             | 1914  | 14                   | 67.8                              | .320                            | 21.42                              |                                                |                       |                  | 4   | 6                     |     | 4                     |     |
| 3        | 3 plants.....                               | 1914  | 12                   | 64.8                              | .344                            | 22.27                              |                                                |                       |                  | 4   | 6                     | 2   |                       |     |
| 4        |                                             | 1915  | 10                   | 64.6                              | .354                            | 22.89                              |                                                |                       |                  | 4   | 4                     | 2   |                       |     |
| 5        | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 6        | 8 plants.....                               | 1913  | 44                   | 69.6                              | .353                            | 26.52                              |                                                | 6                     |                  |     | 4                     | 24  | 10                    |     |
|          |                                             | 1914  | 42                   | 69.4                              | .350                            | 24.03                              |                                                |                       |                  |     | 8                     | 26  | 8                     |     |
| 7        | 10 plants.....                              | 1914  | 52                   | 67.6                              | .353                            | 23.56                              | 6                                              |                       |                  |     | 8                     | 26  | 12                    |     |
| 8        |                                             | 1915  | 52                   | 67.5                              | .368                            | 24.43                              | 6                                              | 6                     |                  |     | 2                     | 26  | 12                    |     |
| 9        | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 10       | 6 plants.....                               | 1913  | 49                   | 68.8                              | .356                            | 24.34                              |                                                | 12                    |                  |     |                       | 28  | 4                     | 5   |
|          |                                             | 1914  | 41                   | 68.5                              | .327                            | 22.17                              |                                                | 12                    |                  |     |                       | 17  | 8                     | 4   |
| 11       | 7 plants.....                               | 1914  | 50                   | 64.9                              | .367                            | 22.96                              |                                                | 21                    |                  |     |                       | 17  | 8                     | 4   |
| 12       |                                             | 1915  | 49                   | 65.5                              | .389                            | 24.54                              |                                                | 18                    |                  |     |                       | 16  | 14                    | 1   |
| 13       | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 14       | 2 plants.....                               | 1913  | 8                    | 72.0                              | .440                            | 31.64                              |                                                |                       |                  |     |                       | 8   |                       |     |
|          |                                             | 1914  | 8                    | 72.0                              | .349                            | 25.09                              |                                                |                       |                  |     |                       | 8   |                       |     |
| 15       | 3 plants.....                               | 1914  | 10                   | 72.0                              | .344                            | 24.78                              |                                                |                       |                  |     |                       | 10  |                       |     |
| 16       |                                             | 1915  | 8                    | 72.0                              | .359                            | 25.81                              |                                                |                       |                  |     |                       | 8   |                       |     |
| 17       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 18       | 19 plants.....                              | 1913  | 115                  | 69.3                              | .369                            | 25.39                              |                                                | 18                    |                  |     | 14                    | 60  | 18                    | 5   |
|          |                                             | 1914  | 105                  | 69.0                              | .337                            | 23.04                              |                                                | 12                    |                  | 4   | 14                    | 51  | 20                    | 4   |
| 19       | 23 plants.....                              | 1914  | 124                  | 68.6                              | .357                            | 23.29                              | 6                                              | 21                    |                  | 4   | 14                    | 55  | 20                    | 4   |
| 20       |                                             | 1915  | 119                  | 66.7                              | .375                            | 24.44                              | 6                                              | 24                    |                  | 4   | 6                     | 52  | 26                    | 1   |
|          | Heaters: Eastern—                           |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 21       | 3 plants.....                               | 1913  | 10                   | 78.9                              | .568                            | 44.17                              |                                                |                       |                  |     | 2                     |     | 2                     | 6   |
| 22       |                                             | 1914  | 8                    | 76.8                              | .511                            | 39.16                              |                                                |                       |                  | 2   |                       |     | 2                     | 4   |
| 23       | 3 plants.....                               | 1914  | 8                    | 75.0                              | .525                            | 39.44                              |                                                |                       |                  | 2   |                       | 2   |                       | 4   |
| 24       |                                             | 1915  | 8                    | 75.0                              | .598                            | 45.38                              |                                                |                       |                  | 2   |                       | 2   |                       | 4   |
| 25       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 26       | 8 plants.....                               | 1913  | 25                   | 71.4                              | .652                            | 46.70                              |                                                | 3                     |                  |     | 2                     | 10  | 10                    |     |
|          |                                             | 1914  | 25                   | 71.3                              | .553                            | 39.19                              |                                                | 3                     |                  |     | 1                     | 13  | 8                     |     |
| 27       | 10 plants.....                              | 1914  | 32                   | 69.5                              | .550                            | 38.02                              |                                                | 6                     |                  |     | 1                     | 17  | 8                     |     |
| 28       |                                             | 1915  | 32                   | 69.9                              | .585                            | 40.70                              |                                                | 6                     |                  |     | 1                     | 15  | 10                    |     |
| 29       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 30       | 6 plants.....                               | 1913  | 38                   | 68.2                              | .555                            | 36.83                              |                                                | 12                    |                  |     |                       | 16  | 6                     | 4   |
|          |                                             | 1914  | 38                   | 68.2                              | .474                            | 31.92                              |                                                | 12                    |                  |     |                       | 16  | 6                     | 4   |
| 31       | 7 plants.....                               | 1914  | 41                   | 67.0                              | .533                            | 34.46                              |                                                | 15                    |                  |     |                       | 16  | 6                     | 4   |
| 32       |                                             | 1915  | 36                   | 67.0                              | .591                            | 37.90                              |                                                | 12                    |                  |     |                       | 14  | 10                    |     |
| 33       | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 34       | 2 plants.....                               | 1913  | 6                    | 76.0                              | .642                            | 49.71                              |                                                |                       |                  |     |                       | 4   |                       | 2   |
|          |                                             | 1914  | 6                    | 76.0                              | .596                            | 45.91                              |                                                |                       |                  |     |                       | 4   |                       | 2   |
| 35       | 3 plants.....                               | 1914  | 8                    | 75.0                              | .578                            | 43.87                              |                                                |                       |                  |     |                       | 6   |                       | 2   |
| 36       |                                             | 1915  | 8                    | 78.0                              | .535                            | 41.95                              |                                                |                       |                  |     |                       | 4   |                       | 4   |
| 37       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 38       | 19 plants.....                              | 1913  | 79                   | 71.2                              | .594                            | 41.86                              |                                                | 15                    |                  |     | 4                     | 30  | 18                    | 12  |
|          |                                             | 1914  | 77                   | 70.7                              | .513                            | 36.12                              |                                                | 15                    |                  | 2   | 1                     | 33  | 16                    | 10  |
| 39       | 23 plants.....                              | 1914  | 89                   | 69.3                              | .542                            | 37.03                              |                                                | 21                    |                  | 2   | 1                     | 41  | 14                    | 10  |
| 40       |                                             | 1915  | 84                   | 69.9                              | .584                            | 40.06                              |                                                | 18                    |                  | 2   | 1                     | 35  | 20                    | 8   |



AND FULL-TIME WEEKLY EARNINGS IN EACH DISTRICT, BY YEARS,  
BLOOMING MILLS.

Middle West." The figures for each group of years are for identical plants.]

| Employees whose rates of wages per hour were— |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | Line<br>No. |
|-----------------------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------|-------------|
| 12 and<br>under<br>14<br>cents.               | 14 and<br>under<br>16<br>cents. | 16 and<br>under<br>18<br>cents. | 18 and<br>under<br>20<br>cents. | 20 and<br>under<br>25<br>cents. | 25 and<br>under<br>30<br>cents. | 30 and<br>under<br>40<br>cents. | 40 and<br>under<br>50<br>cents. | 50 and<br>under<br>60<br>cents. | 60 and<br>under<br>70<br>cents. | 70 cents<br>and<br>over. |             |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 | 4                               |                                 | 6                               | 4                               |                                 |                                 |                          | 1           |
|                                               |                                 |                                 |                                 | 4                               |                                 | 10                              |                                 |                                 |                                 |                          | 2           |
|                                               |                                 |                                 |                                 |                                 |                                 | 12                              |                                 |                                 |                                 |                          | 3           |
|                                               |                                 |                                 |                                 |                                 |                                 | 10                              |                                 |                                 |                                 |                          | 4           |
|                                               |                                 |                                 |                                 | 1                               | 1                               | 24                              | 18                              |                                 |                                 |                          | 5           |
|                                               |                                 |                                 |                                 |                                 | 6                               | 26                              | 10                              |                                 |                                 |                          | 6           |
|                                               |                                 |                                 |                                 |                                 | 6                               | 36                              | 10                              |                                 |                                 |                          | 7           |
|                                               |                                 |                                 |                                 | 1                               | 3                               | 30                              | 18                              |                                 |                                 |                          | 8           |
|                                               |                                 |                                 |                                 | 7                               | 2                               | 20                              | 20                              |                                 |                                 |                          | 9           |
|                                               |                                 |                                 |                                 | 4                               | 7                               | 25                              | 5                               |                                 |                                 |                          | 10          |
|                                               |                                 |                                 |                                 | 4                               | 7                               | 25                              | 5                               |                                 | 9                               |                          | 11          |
|                                               |                                 |                                 |                                 | 1                               | 11                              | 15                              | 11                              |                                 | 11                              |                          | 12          |
|                                               |                                 |                                 |                                 |                                 |                                 | 2                               | 6                               |                                 |                                 |                          | 13          |
|                                               |                                 |                                 |                                 |                                 |                                 | 8                               |                                 |                                 |                                 |                          | 14          |
|                                               |                                 |                                 |                                 |                                 |                                 | 10                              |                                 |                                 |                                 |                          | 15          |
|                                               |                                 |                                 |                                 |                                 |                                 | 8                               |                                 |                                 |                                 |                          | 16          |
|                                               |                                 |                                 |                                 | 12                              | 3                               | 52                              | 48                              |                                 |                                 |                          | 17          |
|                                               |                                 |                                 |                                 | 8                               | 13                              | 69                              | 15                              |                                 |                                 |                          | 18          |
|                                               |                                 |                                 |                                 | 4                               | 13                              | 83                              | 15                              |                                 | 9                               |                          | 19          |
|                                               |                                 |                                 |                                 | 2                               | 14                              | 63                              | 29                              |                                 | 11                              |                          | 20          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 2                               | 4                               | 2                               | 2                        | 21          |
|                                               |                                 |                                 |                                 |                                 |                                 | 2                               |                                 | 6                               |                                 |                          | 22          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 2                               | 6                               |                                 |                          | 23          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 2                               | 2                               | 3                               | 1                        | 24          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 2                               | 8                               | 8                               | 7                        | 25          |
|                                               |                                 |                                 |                                 |                                 |                                 | 2                               | 10                              | 4                               | 5                               | 4                        | 26          |
|                                               |                                 |                                 |                                 |                                 |                                 | 2                               | 10                              | 11                              | 5                               | 4                        | 27          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 4                               | 17                              | 8                               | 3                        | 28          |
|                                               |                                 |                                 |                                 |                                 |                                 | 4                               | 7                               | 11                              | 10                              | 6                        | 29          |
|                                               |                                 |                                 |                                 |                                 | 2                               | 6                               | 17                              | 12                              | 1                               |                          | 30          |
|                                               |                                 |                                 |                                 |                                 | 2                               | 6                               | 17                              | 12                              | 1                               |                          | 31          |
|                                               |                                 |                                 |                                 |                                 |                                 | 1                               | 10                              | 9                               | 12                              | 4                        | 32          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 1                               | 3                               |                                 | 2                        | 33          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 1                               | 3                               |                                 | 2                        | 34          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 1                               | 5                               |                                 | 2                        | 35          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 3                               | 3                               | 2                               |                          | 36          |
|                                               |                                 |                                 |                                 |                                 |                                 | 4                               | 12                              | 26                              | 20                              | 17                       | 37          |
|                                               |                                 |                                 |                                 |                                 | 2                               | 10                              | 28                              | 25                              | 6                               | 6                        | 38          |
|                                               |                                 |                                 |                                 |                                 | 2                               | 8                               | 30                              | 34                              | 6                               | 9                        | 39          |
|                                               |                                 |                                 |                                 |                                 |                                 | 1                               | 19                              | 31                              | 25                              | 8                        | 40          |

TABLE J.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—BLOOMING

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
|          | Heaters' helpers: Eastern—                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 1        | 2 plants.....                               | 1913  | 10                   | 72.7                              | \$0.350                         | \$24.80                            |                                                |                      |                 |    | 4                    |    | 6                    |    |
| 2        |                                             | 1914  | 10                   | 71.4                              | .311                            | 22.08                              |                                                |                      |                 | 4  |                      |    | 6                    |    |
| 3        | 2 plants.....                               | 1914  | 6                    | 64.0                              | .359                            | 23.22                              |                                                |                      |                 | 4  |                      | 2  |                      |    |
| 4        |                                             | 1915  | 6                    | 64.0                              | .370                            | 23.93                              |                                                |                      |                 | 4  |                      | 2  |                      |    |
| 5        | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 6        | 5 plants.....                               | 1913  | 31                   | 62.8                              | .378                            | 23.41                              |                                                | 15                   |                 |    |                      | 6  | 10                   |    |
| 7        |                                             | 1914  | 27                   | 61.7                              | .354                            | 21.14                              |                                                | 15                   |                 |    |                      | 4  | 8                    |    |
|          |                                             | 1915  | 27                   | 61.2                              | .370                            | 22.19                              |                                                | 15                   |                 |    |                      | 6  | 6                    |    |
| 8        | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 9        | 3 plants.....                               | 1913  | 11                   | 62.2                              | .312                            | 19.10                              |                                                | 6                    |                 |    |                      | 4  |                      | 1  |
|          |                                             | 1914  | 6                    | 62.0                              | .301                            | 18.17                              | 3                                              |                      |                 |    |                      | 2  |                      |    |
| 10       | 3 plants.....                               | 1914  | 6                    | 64.0                              | .351                            | 21.41                              |                                                | 3                    |                 |    |                      | 2  |                      | 1  |
| 11       |                                             | 1915  | 6                    | 64.0                              | .363                            | 22.34                              |                                                | 3                    |                 |    |                      | 2  |                      | 1  |
| 12       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 13       | 10 plants.....                              | 1913  | 52                   | 64.6                              | .359                            | 22.76                              |                                                | 21                   |                 |    | 4                    | 10 | 16                   | 1  |
|          |                                             | 1914  | 43                   | 64.0                              | .337                            | 20.95                              | 3                                              | 15                   |                 | 4  |                      | 6  | 14                   | 1  |
| 14       | 10 plants.....                              | 1914  | 39                   | 62.4                              | .355                            | 21.50                              |                                                | 18                   |                 | 4  |                      | 8  | 8                    | 1  |
| 15       |                                             | 1915  | 39                   | 62.1                              | .369                            | 22.48                              |                                                | 18                   |                 | 4  |                      | 10 | 6                    | 1  |
| 16       | Bottom makers: Eastern—                     |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 17       | 1 plant.....                                | 1913  | 4                    | 65.5                              | .297                            | 19.45                              |                                                |                      |                 |    | 4                    |    |                      |    |
|          |                                             | 1914  | 4                    | 65.5                              | .326                            | 21.35                              |                                                |                      |                 |    | 4                    |    |                      |    |
| 18       | 2 plants.....                               | 1914  | 8                    | 68.8                              | .326                            | 22.38                              |                                                |                      |                 |    | 4                    | 4  |                      |    |
| 19       |                                             | 1915  | 6                    | 69.8                              | .362                            | 25.23                              |                                                |                      |                 |    | 2                    | 4  |                      |    |
| 20       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 21       | 7 plants.....                               | 1913  | 30                   | 71.1                              | .425                            | 30.18                              |                                                | 6                    |                 |    |                      | 8  | 12                   | 4  |
|          |                                             | 1914  | 30                   | 70.6                              | .395                            | 27.59                              |                                                | 6                    |                 |    |                      | 8  | 14                   | 2  |
| 22       | 9 plants.....                               | 1914  | 41                   | 66.3                              | .394                            | 25.82                              |                                                | 15                   |                 |    |                      | 8  | 16                   | 2  |
| 23       |                                             | 1915  | 41                   | 65.9                              | .413                            | 26.54                              |                                                | 15                   |                 |    |                      | 8  | 18                   |    |
| 24       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 25       | 5 plants.....                               | 1913  | 22                   | 74.2                              | .307                            | 22.84                              |                                                |                      |                 |    |                      | 16 | 4                    | 2  |
|          |                                             | 1914  | 20                   | 74.9                              | .290                            | 21.68                              |                                                |                      |                 |    |                      | 13 | 5                    | 2  |
| 26       | 6 plants.....                               | 1914  | 23                   | 71.3                              | .359                            | 23.98                              | 3                                              |                      |                 |    |                      | 13 | 5                    | 2  |
| 27       |                                             | 1915  | 22                   | 71.7                              | .382                            | 25.82                              | 3                                              |                      |                 |    |                      | 11 | 6                    | 2  |
| 28       | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 29       | 2 plants.....                               | 1913  | 6                    | 72.0                              | .338                            | 24.34                              |                                                |                      |                 |    |                      | 6  |                      |    |
|          |                                             | 1914  | 6                    | 72.0                              | .313                            | 22.51                              |                                                |                      |                 |    |                      | 6  |                      |    |
| 30       | 3 plants.....                               | 1914  | 7                    | 72.9                              | .315                            | 22.97                              |                                                |                      |                 |    |                      | 6  | 1                    |    |
| 31       |                                             | 1915  | 7                    | 72.9                              | .296                            | 21.56                              |                                                |                      |                 |    |                      | 6  | 1                    |    |
| 32       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 33       | 15 plants.....                              | 1913  | 62                   | 71.9                              | .367                            | 26.32                              |                                                | 6                    |                 |    | 4                    | 30 | 16                   | 6  |
|          |                                             | 1914  | 60                   | 71.8                              | .347                            | 24.70                              |                                                | 6                    |                 |    | 4                    | 27 | 19                   | 4  |
| 34       | 20 plants.....                              | 1914  | 79                   | 68.6                              | .370                            | 24.68                              | 3                                              | 15                   |                 |    | 4                    | 31 | 22                   | 4  |
| 35       |                                             | 1915  | 76                   | 68.5                              | .389                            | 25.77                              | 3                                              | 15                   |                 |    | 2                    | 29 | 25                   | 2  |
| 36       | Bottom makers' helpers: Eastern—            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 37       | 1 plant.....                                | 1914  | 2                    | 72.0                              | .225                            | 16.20                              |                                                |                      |                 |    |                      | 2  |                      |    |
|          |                                             | 1915  | 2                    | 72.0                              | .237                            | 17.06                              |                                                |                      |                 |    |                      | 2  |                      |    |
| 38       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 39       | 7 plants.....                               | 1913  | 34                   | 69.8                              | .302                            | 20.90                              |                                                | 6                    |                 |    |                      | 8  | 20                   |    |
|          |                                             | 1914  | 34                   | 69.4                              | .289                            | 19.81                              |                                                | 6                    |                 |    |                      | 10 | 18                   |    |
| 40       | 8 plants.....                               | 1914  | 38                   | 70.4                              | .288                            | 19.65                              |                                                | 6                    |                 |    |                      | 10 | 22                   |    |
| 41       |                                             | 1915  | 40                   | 70.9                              | .284                            | 19.86                              |                                                | 6                    |                 |    |                      | 8  | 26                   |    |

AND FULL-TIME WEEKLY EARNINGS IN EACH DISTRICT, BY YEARS,  
*MILLS*—Continued.

| Employees whose rates of wages per hour were— |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | Line<br>No. |
|-----------------------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------|-------------|
| 12 and<br>under<br>14<br>cents.               | 14 and<br>under<br>16<br>cents. | 16 and<br>under<br>18<br>cents. | 18 and<br>under<br>20<br>cents. | 20 and<br>under<br>25<br>cents. | 25 and<br>under<br>30<br>cents. | 30 and<br>under<br>40<br>cents. | 40 and<br>under<br>50<br>cents. | 50 and<br>under<br>60<br>cents. | 60 and<br>under<br>70<br>cents. | 70 cents<br>and<br>over. |             |
|                                               |                                 |                                 |                                 |                                 | 6                               |                                 | 4                               |                                 |                                 |                          | 1           |
|                                               |                                 |                                 |                                 |                                 | 6                               | 4                               |                                 |                                 |                                 |                          | 2           |
|                                               |                                 |                                 |                                 |                                 |                                 | 4                               |                                 | 2                               |                                 |                          | 3           |
|                                               |                                 |                                 |                                 |                                 |                                 | 4                               |                                 | 2                               |                                 |                          | 4           |
|                                               |                                 |                                 |                                 | 3                               | 1                               | 5                               | 19                              | 3                               |                                 |                          | 5           |
|                                               |                                 |                                 |                                 | 2                               | 6                               | 12                              | 6                               | 1                               |                                 |                          | 6           |
|                                               |                                 |                                 |                                 | 2                               | 2                               | 18                              | 3                               | 2                               |                                 |                          | 7           |
|                                               |                                 |                                 |                                 |                                 | 4                               | 7                               |                                 |                                 |                                 |                          | 8           |
|                                               |                                 |                                 |                                 | 2                               |                                 | 4                               |                                 |                                 |                                 |                          | 9           |
|                                               |                                 |                                 |                                 | 2                               |                                 | 1                               | 3                               |                                 |                                 |                          | 10          |
|                                               |                                 |                                 |                                 |                                 | 2                               | 1                               | 3                               |                                 |                                 |                          | 11          |
|                                               |                                 |                                 |                                 | 3                               | 11                              | 12                              | 23                              | 3                               |                                 |                          | 12          |
|                                               |                                 |                                 |                                 | 4                               | 12                              | 20                              | 6                               | 1                               |                                 |                          | 13          |
|                                               |                                 |                                 |                                 | 4                               | 6                               | 17                              | 11                              | 1                               |                                 |                          | 14          |
|                                               |                                 |                                 |                                 | 2                               | 4                               | 23                              | 8                               | 2                               |                                 |                          | 15          |
|                                               |                                 |                                 |                                 |                                 | 4                               |                                 |                                 |                                 |                                 |                          | 16          |
|                                               |                                 |                                 |                                 |                                 |                                 | 4                               |                                 |                                 |                                 |                          | 17          |
|                                               |                                 |                                 |                                 |                                 |                                 | 8                               |                                 |                                 |                                 |                          | 18          |
|                                               |                                 |                                 |                                 |                                 |                                 | 6                               |                                 |                                 |                                 |                          | 19          |
|                                               |                                 |                                 |                                 |                                 | 2                               | 5                               | 21                              |                                 | 2                               |                          | 20          |
|                                               |                                 |                                 |                                 |                                 | 4                               | 8                               | 16                              | 2                               |                                 |                          | 21          |
|                                               |                                 |                                 |                                 |                                 | 4                               | 13                              | 22                              | 2                               |                                 |                          | 22          |
|                                               |                                 |                                 |                                 |                                 |                                 | 17                              | 16                              | 8                               |                                 |                          | 23          |
|                                               |                                 |                                 |                                 | 6                               | 10                              |                                 | 6                               |                                 |                                 |                          | 24          |
|                                               |                                 |                                 |                                 | 5                               | 9                               | 4                               | 2                               |                                 |                                 |                          | 25          |
|                                               |                                 |                                 |                                 | 5                               | 9                               | 4                               | 2                               |                                 |                                 |                          | 26          |
|                                               |                                 |                                 |                                 | 4                               | 9                               | 2                               | 4                               |                                 |                                 | 3                        | 27          |
|                                               |                                 |                                 |                                 | 2                               |                                 | 4                               |                                 |                                 |                                 |                          | 28          |
|                                               |                                 |                                 |                                 | 2                               |                                 | 4                               |                                 |                                 |                                 |                          | 29          |
|                                               |                                 |                                 |                                 | 2                               |                                 | 5                               |                                 |                                 |                                 |                          | 30          |
|                                               |                                 |                                 |                                 | 2                               |                                 | 5                               |                                 |                                 |                                 |                          | 31          |
|                                               |                                 |                                 |                                 | 8                               | 16                              | 9                               | 27                              |                                 | 2                               |                          | 32          |
|                                               |                                 |                                 |                                 | 7                               | 13                              | 20                              | 18                              | 2                               |                                 |                          | 33          |
|                                               |                                 |                                 |                                 | 7                               | 13                              | 30                              | 24                              | 2                               |                                 | 3                        | 34          |
|                                               |                                 |                                 |                                 | 6                               | 9                               | 30                              | 20                              | 8                               |                                 | 3                        | 35          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | 36          |
|                                               |                                 |                                 |                                 | 2                               |                                 |                                 |                                 |                                 |                                 |                          | 37          |
|                                               |                                 |                                 |                                 | 2                               |                                 |                                 |                                 |                                 |                                 |                          | 38          |
|                                               |                                 |                                 |                                 | 2                               | 2                               | 13                              | 19                              |                                 |                                 |                          | 39          |
|                                               |                                 |                                 |                                 | 2                               | 2                               | 17                              | 13                              |                                 |                                 |                          | 40          |
|                                               |                                 |                                 |                                 | 2                               | 4                               | 19                              | 13                              |                                 |                                 |                          | 41          |
|                                               |                                 |                                 |                                 | 2                               | 4                               | 16                              | 18                              |                                 |                                 |                          | 41          |

TABLE J.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—BLOOMING

| Line No. | Occupation, district, and number of plants.                            | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|------------------------------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                                                        |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
|          | Bottom makers' helpers—Concluded.<br>G. L. and M. W.—<br>4 plants..... | 1913  | 25                   | 74.9                              | \$0.217                         | \$16.12                            |                                                |                      |                 |    |                      | 19 |                      | 6  |
| 1        |                                                                        | 1914  | 16                   | 75.2                              | .208                            | 15.54                              |                                                |                      |                 |    |                      | 11 | 2                    | 3  |
| 2        |                                                                        |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 3        | 5 plants.....                                                          | 1914  | 22                   | 67.8                              | .273                            | 17.14                              | 6                                              |                      |                 |    |                      | 11 | 2                    | 3  |
| 4        |                                                                        | 1915  | 26                   | 69.4                              | .264                            | 17.10                              | 6                                              |                      |                 |    | 1                    | 11 | 4                    | 4  |
| 5        | Southern—<br>2 plants.....                                             | 1913  | 6                    | 72.0                              | .238                            | 17.14                              |                                                |                      |                 |    |                      |    |                      |    |
| 6        |                                                                        | 1914  | 6                    | 72.0                              | .216                            | 15.53                              |                                                |                      |                 |    |                      | 6  |                      |    |
| 7        |                                                                        |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 8        | 3 plants.....                                                          | 1914  | 8                    | 72.0                              | .235                            | 16.92                              |                                                |                      |                 |    |                      | 8  |                      |    |
| 9        |                                                                        | 1915  | 8                    | 72.0                              | .225                            | 16.23                              |                                                |                      |                 |    |                      | 8  |                      |    |
| 10       | Total—<br>13 plants.....                                               | 1913  | 65                   | 72.0                              | .263                            | 18.72                              |                                                | 6                    |                 |    |                      | 33 | 20                   | 6  |
| 11       |                                                                        | 1914  | 56                   | 71.3                              | .258                            | 18.14                              |                                                | 6                    |                 |    |                      | 27 | 20                   | 3  |
| 12       | 17 plants.....                                                         | 1914  | 70                   | 69.8                              | .273                            | 18.45                              | 6                                              | 6                    |                 |    |                      | 31 | 24                   | 3  |
| 13       |                                                                        | 1915  | 76                   | 70.5                              | .269                            | 18.46                              | 6                                              | 6                    |                 |    | 1                    | 29 | 30                   | 4  |
| 14       | Roll engineers:<br>Eastern—<br>3 plants.....                           | 1913  | 6                    | 69.3                              | .415                            | 28.19                              |                                                |                      |                 |    |                      | 4  |                      | 2  |
| 15       |                                                                        | 1914  | 6                    | 68.2                              | .365                            | 24.66                              |                                                |                      |                 | 2  | 2                    |    | 2                    |    |
| 16       | 3 plants.....                                                          | 1914  | 6                    | 65.8                              | .441                            | 29.34                              |                                                |                      |                 | 2  | 2                    | 2  |                      |    |
| 17       |                                                                        | 1915  | 5                    | 65.9                              | .485                            | 32.40                              |                                                |                      |                 | 2  | 1                    | 2  |                      |    |
| 18       | Pittsburgh—<br>8 plants.....                                           | 1913  | 24                   | 62.8                              | .539                            | 31.85                              | 6                                              | 6                    |                 |    |                      | 4  | 8                    |    |
| 19       |                                                                        | 1914  | 24                   | 61.5                              | .474                            | 27.87                              | 6                                              | 6                    |                 |    |                      | 6  | 6                    |    |
| 20       | 10 plants.....                                                         | 1914  | 28                   | 60.6                              | .473                            | 27.49                              | 9                                              | 6                    |                 |    |                      | 6  | 7                    |    |
| 21       |                                                                        | 1915  | 28                   | 60.6                              | .501                            | 29.06                              | 9                                              | 6                    |                 |    |                      | 6  | 7                    |    |
| 22       | G. L. and M. W.—<br>6 plants.....                                      | 1913  | 19                   | 74.2                              | .396                            | 29.39                              |                                                |                      |                 |    |                      | 14 | 3                    | 2  |
| 23       |                                                                        | 1914  | 19                   | 74.2                              | .371                            | 27.48                              |                                                |                      |                 |    |                      | 14 | 3                    | 2  |
| 24       | 7 plants.....                                                          | 1914  | 22                   | 70.6                              | .414                            | 28.20                              | 3                                              |                      |                 |    |                      | 14 | 3                    | 2  |
| 25       |                                                                        | 1915  | 22                   | 70.4                              | .439                            | 30.06                              | 3                                              |                      |                 |    |                      | 15 | 2                    | 2  |
| 26       | Southern—<br>2 plants.....                                             | 1913  | 3                    | 76.0                              | .513                            | 39.36                              |                                                |                      |                 |    |                      | 1  | 2                    |    |
| 27       |                                                                        | 1914  | 3                    | 72.0                              | .497                            | 35.76                              |                                                |                      |                 |    |                      | 3  |                      |    |
| 28       | 3 plants.....                                                          | 1914  | 4                    | 72.0                              | .458                            | 32.99                              |                                                |                      |                 |    |                      | 4  |                      |    |
| 29       |                                                                        | 1915  | 4                    | 72.0                              | .422                            | 30.40                              |                                                |                      |                 |    |                      | 4  |                      |    |
| 30       | Total—<br>19 plants.....                                               | 1913  | 52                   | 68.5                              | .471                            | 30.96                              | 6                                              | 6                    |                 |    |                      | 4  | 19                   | 15 |
| 31       |                                                                        | 1914  | 52                   | 67.5                              | .425                            | 27.81                              | 6                                              | 6                    |                 |    | 2                    | 2  | 23                   | 11 |
| 32       | 23 plants.....                                                         | 1914  | 60                   | 65.6                              | .447                            | 28.30                              | 12                                             | 6                    |                 |    | 2                    | 2  | 26                   | 10 |
| 33       |                                                                        | 1915  | 59                   | 65.4                              | .471                            | 29.81                              | 12                                             | 6                    |                 |    | 2                    | 1  | 27                   | 9  |
| 34       | Rollers:<br>Eastern—<br>3 plants.....                                  | 1913  | 6                    | 69.3                              | .499                            | 33.75                              |                                                |                      |                 |    |                      | 4  |                      | 2  |
| 35       |                                                                        | 1914  | 6                    | 68.2                              | .490                            | 32.96                              |                                                |                      |                 |    | 2                    | 2  |                      | 2  |
| 36       | 3 plants.....                                                          | 1914  | 6                    | 65.8                              | .672                            | 45.17                              |                                                |                      |                 |    | 2                    | 2  | 2                    |    |
| 37       |                                                                        | 1915  | 5                    | 65.9                              | .706                            | 47.63                              |                                                |                      |                 |    | 2                    | 1  | 2                    |    |
| 38       | Pittsburgh—<br>8 plants.....                                           | 1913  | 24                   | 60.5                              | .791                            | 46.31                              | 6                                              | 6                    |                 |    |                      | 2  | 10                   |    |
| 39       |                                                                        | 1914  | 24                   | 60.4                              | .697                            | 41.28                              | 6                                              | 6                    |                 |    |                      | 1  | 11                   |    |
| 40       | 10 plants.....                                                         | 1914  | 28                   | 59.7                              | .687                            | 40.28                              | 6                                              | 9                    |                 |    |                      | 1  | 12                   |    |
| 41       |                                                                        | 1915  | 28                   | 59.7                              | .692                            | 40.47                              | 6                                              | 9                    |                 |    |                      | 1  | 12                   |    |
| 42       | G. L. and M. W.—<br>6 plants.....                                      | 1913  | 13                   | 73.9                              | .612                            | 45.17                              |                                                |                      |                 |    |                      |    | 9                    | 4  |
| 43       |                                                                        | 1914  | 13                   | 72.0                              | .558                            | 40.17                              |                                                |                      |                 |    |                      |    | 13                   |    |
| 44       | 7 plants.....                                                          | 1914  | 16                   | 67.5                              | .693                            | 44.16                              | 3                                              |                      |                 |    |                      |    | 13                   |    |
| 45       |                                                                        | 1915  | 16                   | 67.5                              | .715                            | 45.88                              | 3                                              |                      |                 |    |                      |    | 13                   |    |

AND FULL-TIME WEEKLY EARNINGS IN EACH DISTRICT, BY YEARS,  
MILLS—Continued.

| Employees whose rates of wages per hour were— |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | Line<br>No. |
|-----------------------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------|-------------|
| 12 and<br>under<br>14<br>cents.               | 14 and<br>under<br>16<br>cents. | 16 and<br>under<br>18<br>cents. | 18 and<br>under<br>20<br>cents. | 20 and<br>under<br>25<br>cents. | 25 and<br>under<br>30<br>cents. | 30 and<br>under<br>40<br>cents. | 40 and<br>under<br>50<br>cents. | 50 and<br>under<br>60<br>cents. | 60 and<br>under<br>70<br>cents. | 70 cents<br>and<br>over. |             |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 | 4                               | 12                              | 5                               |                                 | 4                               |                                 |                                 |                                 |                          | 1           |
|                                               |                                 | 3                               | 4                               | 9                               |                                 |                                 |                                 |                                 |                                 |                          | 2           |
|                                               |                                 | 3                               | 4                               | 9                               |                                 |                                 |                                 | 6                               |                                 |                          | 3           |
|                                               |                                 | 4                               | 7                               | 5                               | 4                               |                                 |                                 | 6                               |                                 |                          | 4           |
|                                               |                                 | 2                               |                                 |                                 | 4                               |                                 |                                 |                                 |                                 |                          | 5           |
|                                               |                                 | 2                               |                                 |                                 | 4                               |                                 |                                 |                                 |                                 |                          | 6           |
|                                               |                                 | 2                               |                                 |                                 | 4                               | 2                               |                                 |                                 |                                 |                          | 7           |
|                                               | 2                               |                                 |                                 | 4                               | 2                               | 2                               |                                 |                                 |                                 |                          | 8           |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 | 6                               | 14                              | 5                               | 17                              | 23                              |                                 |                                 |                                 |                          | 9           |
|                                               |                                 | 5                               | 6                               | 15                              | 17                              | 13                              |                                 |                                 |                                 |                          | 10          |
|                                               |                                 | 5                               | 6                               | 19                              | 21                              | 13                              | 6                               |                                 |                                 |                          | 11          |
|                                               | 2                               | 4                               | 9                               | 15                              | 22                              | 18                              | 6                               |                                 |                                 |                          | 12          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 | 2                               | 2                               | 2                               |                                 |                          | 13          |
|                                               |                                 |                                 |                                 |                                 |                                 | 5                               | 1                               |                                 |                                 |                          | 14          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 | 3                               | 1                               | 2                               |                                 |                          | 15          |
|                                               |                                 |                                 |                                 |                                 |                                 | 1                               | 2                               | 2                               |                                 |                          | 16          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 | 9                               | 1                               | 2                               | 9                               | 3                        | 17          |
|                                               |                                 |                                 |                                 |                                 |                                 | 10                              | 4                               | 5                               | 5                               |                          | 18          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 | 11                              | 5                               | 7                               | 5                               |                          | 19          |
|                                               |                                 |                                 |                                 |                                 |                                 | 9                               | 6                               | 5                               | 6                               | 2                        | 20          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 | 11                              | 5                               | 3                               |                                 |                          | 21          |
|                                               |                                 |                                 |                                 |                                 | 2                               | 10                              | 7                               |                                 |                                 |                          | 22          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 | 2                               | 10                              | 7                               |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 | 1                               | 5                               |                                 | 2                               | 1                        | 23          |
|                                               |                                 |                                 |                                 |                                 |                                 | 11                              |                                 | 3                               |                                 |                          | 24          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 | 1                               |                                 |                                 | 2                               |                          | 25          |
|                                               |                                 |                                 |                                 |                                 |                                 | 1                               |                                 | 2                               |                                 |                          | 26          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 | 2                               |                                 | 2                               |                                 |                          | 27          |
|                                               |                                 |                                 |                                 |                                 |                                 | 2                               |                                 | 2                               |                                 |                          | 28          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 | 23                              | 8                               | 7                               | 11                              | 3                        | 29          |
|                                               |                                 |                                 |                                 |                                 | 2                               | 26                              | 12                              | 7                               | 5                               |                          | 30          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 | 2                               | 26                              | 13                              | 11                              | 7                               | 1                        | 31          |
|                                               |                                 |                                 |                                 |                                 |                                 | 23                              | 13                              | 12                              | 9                               | 2                        | 32          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 | 2                               | 2                               |                                 | 2                               |                          | 33          |
|                                               |                                 |                                 |                                 |                                 |                                 | 2                               | 1                               | 1                               | 2                               |                          | 34          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 | 1                               |                                 | 1                               | 2                               | 2                        | 35          |
|                                               |                                 |                                 |                                 |                                 |                                 | 1                               |                                 | 1                               | 1                               | 2                        | 36          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 5                               | 4                               | 15                       | 27          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 3                               | 9                               | 10                       | 28          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 2                               |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 5                               |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 2                               | 7                               | 11                              | 10                       | 33          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 9                               | 12                       | 40          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 | 2                               | 5                               |                                 | 3                               | 3                        | 41          |
|                                               |                                 |                                 |                                 |                                 |                                 | 5                               | 4                               |                                 | 2                               | 2                        | 42          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 | 5                               | 4                               |                                 | 2                               | 5                        | 43          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 4                               | 3                               | 3                               | 6                        | 44          |

TABLE J.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, 1913 TO 1915—BLOOMING

| Line No. | Occupation, district, and number of plants.      | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|--------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                                  |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Rollers—Concluded.<br>Southern—<br>2 plants..... | 1913  | 3                    | 72.0                              | \$0.777                         | \$55.92                            |                                                |                      |                 |    |                      |    | 3                    |    |
| 2        |                                                  | 1914  | 3                    | 72.0                              | .707                            | 50.93                              |                                                |                      |                 |    |                      |    | 3                    |    |
| 3        | 3 plants.....                                    | 1914  | 4                    | 72.0                              | .647                            | 46.57                              |                                                |                      |                 |    |                      |    | 4                    |    |
| 4        |                                                  | 1915  | 4                    | 72.0                              | .651                            | 46.84                              |                                                |                      |                 |    |                      |    | 4                    |    |
| 5        | Total—<br>19 plants.....                         | 1913  | 46                   | 66.2                              | .701                            | 44.98                              | 6                                              | 6                    |                 |    | 6                    | 22 | 6                    |    |
| 6        |                                                  | 1914  | 46                   | 65.5                              | .632                            | 40.51                              | 6                                              | 6                    |                 | 2  | 3                    | 27 | 2                    |    |
| 7        | 23 plants.....                                   | 1914  | 54                   | 63.6                              | .684                            | 42.44                              | 9                                              | 9                    |                 | 2  | 3                    | 31 |                      |    |
| 8        |                                                  | 1915  | 53                   | 63.5                              | .697                            | 43.26                              | 9                                              | 9                    |                 | 2  | 2                    | 31 |                      |    |
| 9        | Manipulators:<br>Eastern—<br>3 plants.....       | 1913  | 8                    | 68.3                              | .360                            | 24.25                              |                                                |                      |                 |    | 6                    |    |                      | 2  |
| 10       |                                                  | 1914  | 6                    | 68.2                              | .322                            | 21.64                              |                                                |                      |                 | 2  | 2                    |    |                      | 2  |
| 11       | 3 plants.....                                    | 1914  | 6                    | 65.8                              | .366                            | 24.20                              |                                                |                      |                 | 2  | 2                    | 2  |                      |    |
| 12       |                                                  | 1915  | 5                    | 65.9                              | .435                            | 28.83                              |                                                |                      |                 | 2  | 1                    | 2  |                      |    |
| 13       | Pittsburgh—<br>8 plants.....                     | 1913  | 24                   | 60.5                              | .511                            | 29.43                              | 6                                              | 6                    |                 |    | 2                    | 10 |                      |    |
| 14       |                                                  | 1914  | 24                   | 60.4                              | .444                            | 25.88                              | 6                                              | 6                    |                 |    | 1                    | 11 |                      |    |
| 15       | 10 plants.....                                   | 1914  | 28                   | 59.7                              | .439                            | 25.31                              | 6                                              | 9                    |                 |    | 1                    | 12 |                      |    |
| 16       |                                                  | 1915  | 28                   | 59.7                              | .452                            | 25.97                              | 6                                              | 9                    |                 |    | 1                    | 12 |                      |    |
| 17       | G. L. and M. W.—<br>6 plants.....                | 1913  | 25                   | 68.0                              | .375                            | 24.60                              |                                                | 6                    |                 |    |                      | 12 | 7                    |    |
| 18       |                                                  | 1914  | 21                   | 65.1                              | .332                            | 21.30                              | 6                                              |                      |                 |    |                      | 15 |                      |    |
| 19       | 7 plants.....                                    | 1914  | 24                   | 63.2                              | .345                            | 21.37                              | 6                                              | 3                    |                 |    |                      | 15 |                      |    |
| 20       |                                                  | 1915  | 23                   | 66.0                              | .383                            | 24.49                              | 3                                              | 3                    |                 |    |                      | 17 |                      |    |
| 21       | Southern—<br>2 plants.....                       | 1913  | 3                    | 72.0                              | .446                            | 32.14                              |                                                |                      |                 |    |                      | 3  |                      |    |
| 22       |                                                  | 1914  | 3                    | 72.0                              | .426                            | 30.67                              |                                                |                      |                 |    |                      | 3  |                      |    |
| 23       | 3 plants.....                                    | 1914  | 4                    | 72.0                              | .411                            | 29.56                              |                                                |                      |                 |    |                      | 4  |                      |    |
| 24       |                                                  | 1915  | 4                    | 72.0                              | .395                            | 28.44                              |                                                |                      |                 |    |                      | 4  |                      |    |
| 25       | Total—<br>19 plants.....                         | 1913  | 60                   | 65.3                              | .431                            | 26.86                              | 6                                              | 12                   |                 |    | 8                    | 25 | 9                    |    |
| 26       |                                                  | 1914  | 54                   | 63.8                              | .386                            | 23.89                              | 12                                             | 6                    |                 | 2  | 3                    | 29 | 2                    |    |
| 27       | 23 plants.....                                   | 1914  | 62                   | 62.4                              | .394                            | 23.95                              | 12                                             | 12                   |                 | 2  | 3                    | 33 |                      |    |
| 28       |                                                  | 1915  | 60                   | 63.4                              | .420                            | 25.81                              | 9                                              | 12                   |                 | 2  | 2                    | 35 |                      |    |
| 29       | Table men:<br>Eastern—<br>2 plants.....          | 1913  | 4                    | 71.1                              | .270                            | 18.91                              |                                                |                      |                 |    | 2                    |    |                      | 2  |
| 30       |                                                  | 1914  | 4                    | 69.5                              | .236                            | 16.53                              |                                                |                      |                 | 2  |                      |    |                      | 2  |
| 31       | 2 plants.....                                    | 1914  | 4                    | 66.0                              | .318                            | 21.56                              |                                                |                      |                 | 2  |                      | 2  |                      |    |
| 32       |                                                  | 1915  | 4                    | 66.0                              | .340                            | 23.11                              |                                                |                      |                 | 2  |                      | 2  |                      |    |
| 33       | Pittsburgh—<br>5 plants.....                     | 1913  | 16                   | 63.8                              | .386                            | 24.24                              |                                                | 6                    |                 |    | 2                    | 8  |                      |    |
| 34       |                                                  | 1914  | 18                   | 64.6                              | .316                            | 20.06                              |                                                | 6                    |                 |    | 1                    | 11 |                      |    |
| 35       | 6 plants.....                                    | 1914  | 19                   | 61.1                              | .341                            | 20.42                              | 3                                              | 6                    |                 |    | 1                    | 9  |                      |    |
| 36       |                                                  | 1915  | 17                   | 59.8                              | .365                            | 21.37                              | 3                                              | 6                    |                 |    | 1                    | 7  |                      |    |
| 37       | G. L. and M. W.—<br>2 plants.....                | 1913  | 5                    | 72.0                              | .216                            | 15.55                              |                                                |                      |                 |    |                      | 5  |                      |    |
| 38       |                                                  | 1914  | 5                    | 72.0                              | .209                            | 15.03                              |                                                |                      |                 |    |                      | 5  |                      |    |
| 39       | 3 plants.....                                    | 1914  | 8                    | 63.0                              | .303                            | 17.65                              | 3                                              |                      |                 |    |                      | 5  |                      |    |
| 40       |                                                  | 1915  | 8                    | 63.0                              | .305                            | 17.90                              | 3                                              |                      |                 |    |                      | 5  |                      |    |
| 41       | Southern—<br>2 plants.....                       | 1913  | 4                    | 72.0                              | .249                            | 17.93                              |                                                |                      |                 |    |                      | 4  |                      |    |
| 42       |                                                  | 1914  | 4                    | 72.0                              | .230                            | 16.52                              |                                                |                      |                 |    |                      | 4  |                      |    |
| 43       | 3 plants.....                                    | 1914  | 5                    | 72.0                              | .227                            | 16.33                              |                                                |                      |                 |    |                      | 5  |                      |    |
| 44       |                                                  | 1915  | 5                    | 72.0                              | .220                            | 15.84                              |                                                |                      |                 |    |                      | 5  |                      |    |

AND FULL-TIME WEEKLY EARNINGS IN EACH DISTRICT, BY YEARS,  
MILLS—Continued.

| Employees whose rates of wages per hour were— |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    | Line No. |
|-----------------------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|--------------------|----------|
| 12 and under 14 cents.                        | 14 and under 16 cents. | 16 and under 18 cents. | 18 and under 20 cents. | 20 and under 25 cents. | 25 and under 30 cents. | 30 and under 40 cents. | 40 and under 50 cents. | 50 and under 60 cents. | 60 and under 70 cents. | 70 cents and over. |          |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        |                        |                        |                        |                        | 1                      |                        | 2                  | 1        |
|                                               |                        |                        |                        |                        |                        |                        |                        | 1                      |                        | 2                  | 2        |
|                                               |                        |                        |                        |                        |                        |                        | 1                      | 1                      |                        | 2                  | 3        |
|                                               |                        |                        |                        |                        |                        |                        | 1                      | 1                      |                        | 2                  | 4        |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        |                        |                        | 2                      | 4                      | 11                     | 9                      | 20                 | 5        |
|                                               |                        |                        |                        |                        |                        | 2                      | 8                      | 9                      | 13                     | 14                 | 6        |
|                                               |                        |                        |                        |                        |                        |                        | 9                      | 11                     | 15                     | 19                 | 7        |
|                                               |                        |                        |                        |                        |                        |                        | 6                      | 12                     | 13                     | 22                 | 8        |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        |                        | 2                      | 4                      |                        | 2                      |                        |                    | 9        |
|                                               |                        |                        |                        |                        | 2                      | 3                      | 1                      |                        |                        |                    | 10       |
|                                               |                        |                        |                        |                        |                        | 3                      | 3                      |                        |                        |                    | 11       |
|                                               |                        |                        |                        |                        |                        | 2                      | 2                      | 1                      |                        |                    | 12       |
|                                               |                        |                        |                        |                        |                        | 9                      | 6                      |                        |                        |                    | 13       |
|                                               |                        |                        |                        |                        |                        | 9                      | 9                      | 3                      | 6                      | 3                  | 14       |
|                                               |                        |                        |                        |                        | 1                      | 9                      | 12                     | 3                      | 3                      |                    | 15       |
|                                               |                        |                        |                        |                        | 1                      | 8                      | 10                     | 6                      | 1                      | 2                  | 16       |
|                                               |                        |                        |                        | 6                      | 3                      | 5                      | 7                      | 4                      |                        |                    | 17       |
|                                               |                        |                        |                        | 2                      | 7                      | 8                      | 4                      |                        |                        |                    | 18       |
|                                               |                        |                        |                        | 2                      | 7                      | 8                      | 7                      |                        |                        |                    | 19       |
|                                               |                        |                        |                        | 2                      | 5                      | 6                      | 6                      | 4                      |                        |                    | 20       |
|                                               |                        |                        |                        |                        |                        | 1                      |                        | 2                      |                        |                    | 21       |
|                                               |                        |                        |                        |                        | 1                      |                        | 2                      |                        |                        |                    | 22       |
|                                               |                        |                        |                        |                        | 1                      | 1                      | 2                      |                        |                        |                    | 23       |
|                                               |                        |                        |                        |                        | 1                      | 1                      | 2                      |                        |                        |                    | 24       |
|                                               |                        |                        |                        | 6                      | 5                      | 19                     | 13                     | 8                      | 6                      | 3                  | 25       |
|                                               |                        |                        |                        | 2                      | 10                     | 20                     | 16                     | 3                      | 3                      |                    | 26       |
|                                               |                        |                        |                        | 2                      | 9                      | 21                     | 24                     | 3                      | 3                      |                    | 27       |
|                                               |                        |                        |                        | 2                      | 7                      | 17                     | 20                     | 11                     | 1                      | 2                  | 28       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    |          |
|                                               |                        |                        |                        | 2                      |                        | 2                      |                        |                        |                        |                    | 29       |
|                                               |                        |                        |                        | 2                      | 2                      |                        |                        |                        |                        |                    | 30       |
|                                               |                        |                        |                        | 2                      |                        |                        | 2                      |                        |                        |                    | 31       |
|                                               |                        |                        |                        | 2                      |                        |                        | 2                      |                        |                        |                    | 32       |
|                                               |                        |                        |                        | 1                      | 2                      | 6                      | 4                      | 3                      |                        |                    | 33       |
|                                               |                        |                        |                        | 2                      | 2                      | 14                     |                        |                        |                        |                    | 34       |
|                                               |                        |                        |                        |                        | 2                      | 15                     | 2                      |                        |                        |                    | 35       |
|                                               |                        |                        |                        |                        | 1                      | 13                     | 1                      | 2                      |                        |                    | 36       |
|                                               |                        |                        |                        | 5                      |                        |                        |                        |                        |                        |                    | 37       |
|                                               |                        |                        |                        | 5                      |                        |                        |                        |                        |                        |                    | 38       |
|                                               |                        |                        |                        | 5                      |                        |                        | 3                      |                        |                        |                    | 39       |
|                                               |                        |                        |                        | 5                      |                        |                        | 3                      |                        |                        |                    | 40       |
|                                               |                        |                        |                        |                        |                        | 2                      |                        |                        |                        |                    | 41       |
|                                               |                        | 2                      |                        |                        | 2                      |                        |                        |                        |                        |                    | 42       |
|                                               |                        | 2                      |                        | 1                      | 2                      |                        |                        |                        |                        |                    | 43       |
|                                               |                        | 2                      |                        | 1                      | 2                      |                        |                        |                        |                        |                    | 44       |

TABLE J.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—BLOOMING

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
|          | Table men—Concl'd.                          |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 1        | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 2        | 11 plants.....                              | 1913  | 29                   | 67.3                              | \$6.322                         | \$21.14                            |                                                | 6                    |                 |    | 4                    | 17 | 2                    |    |
|          |                                             | 1914  | 31                   | 67.4                              | .277                            | 18.34                              |                                                | 6                    |                 | 2  | 1                    | 20 | 2                    |    |
| 3        | 14 plants.....                              | 1914  | 36                   | 63.6                              | .314                            | 19.36                              | 6                                              | 6                    |                 | 2  | 1                    | 21 |                      |    |
| 4        |                                             | 1915  | 34                   | 63.1                              | .327                            | 19.94                              | 6                                              | 6                    |                 | 2  | 1                    | 19 |                      |    |
|          | Shearmen:                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 5        | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 6        | 3 plants.....                               | 1913  | 6                    | 69.3                              | .382                            | 26.19                              |                                                |                      |                 |    | 4                    |    | 2                    |    |
|          |                                             | 1914  | 6                    | 68.2                              | .329                            | 22.61                              |                                                |                      |                 | 2  | 2                    |    | 2                    |    |
| 7        | 3 plants.....                               | 1914  | 6                    | 65.8                              | .353                            | 23.54                              |                                                |                      |                 | 2  | 2                    | 2  |                      |    |
| 8        |                                             | 1915  | 5                    | 65.9                              | .385                            | 25.81                              |                                                |                      |                 | 2  | 1                    | 2  |                      |    |
| 9        | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 10       | 8 plants.....                               | 1913  | 28                   | 67.3                              | .358                            | 23.34                              | 3                                              | 3                    |                 |    | 2                    | 16 | 4                    |    |
|          |                                             | 1914  | 31                   | 65.4                              | .334                            | 21.10                              |                                                | 9                    |                 |    | 1                    | 21 |                      |    |
| 11       | 10 plants.....                              | 1914  | 34                   | 66.0                              | .337                            | 21.54                              |                                                | 9                    |                 |    | 3                    | 22 |                      |    |
| 12       |                                             | 1915  | 34                   | 66.0                              | .341                            | 21.73                              |                                                | 9                    |                 |    | 3                    | 22 |                      |    |
| 13       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 14       | 6 plants.....                               | 1913  | 19                   | 65.7                              | .386                            | 24.82                              | 6                                              |                      |                 |    |                      | 9  | 4                    |    |
|          |                                             | 1914  | 18                   | 64.0                              | .315                            | 20.08                              | 6                                              |                      |                 |    |                      | 12 |                      |    |
| 15       | 7 plants.....                               | 1914  | 21                   | 61.7                              | .359                            | 21.48                              | 9                                              |                      |                 |    |                      | 12 |                      |    |
| 16       |                                             | 1915  | 19                   | 64.4                              | .403                            | 24.92                              | 6                                              |                      |                 |    |                      | 13 |                      |    |
| 17       | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 18       | 2 plants.....                               | 1913  | 3                    | 72.0                              | .359                            | 25.85                              |                                                |                      |                 |    |                      | 3  |                      |    |
|          |                                             | 1914  | 3                    | 72.0                              | .353                            | 25.39                              |                                                |                      |                 |    |                      | 3  |                      |    |
| 19       | 3 plants.....                               | 1914  | 4                    | 72.0                              | .330                            | 23.76                              |                                                |                      |                 |    |                      | 4  |                      |    |
| 20       |                                             | 1915  | 4                    | 72.0                              | .312                            | 22.46                              |                                                |                      |                 |    |                      | 4  |                      |    |
| 21       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 22       | 19 plants.....                              | 1913  | 56                   | 67.2                              | .370                            | 24.23                              | 9                                              | 3                    |                 |    | 6                    | 28 | 10                   |    |
|          |                                             | 1914  | 58                   | 65.6                              | .329                            | 21.16                              | 6                                              | 9                    |                 | 2  | 3                    | 36 | 2                    |    |
| 23       | 23 plants.....                              | 1914  | 65                   | 65.0                              | .345                            | 21.84                              | 9                                              | 9                    |                 | 2  | 5                    | 40 |                      |    |
| 24       |                                             | 1915  | 62                   | 65.9                              | .362                            | 23.09                              | 6                                              | 9                    |                 | 2  | 4                    | 41 |                      |    |
|          | Shearmen's helpers:                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 25       | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 26       | 2 plants.....                               | 1913  | 8                    | 67.2                              | .269                            | 17.98                              |                                                |                      |                 |    | 6                    |    | 2                    |    |
|          |                                             | 1914  | 8                    | 64.8                              | .215                            | 14.08                              |                                                |                      |                 | 6  |                      |    | 2                    |    |
| 27       | 2 plants.....                               | 1914  | 18                   | 68.0                              | .272                            | 18.78                              |                                                |                      |                 | 6  |                      | 12 |                      |    |
| 28       |                                             | 1915  | 18                   | 68.0                              | .295                            | 20.41                              |                                                |                      |                 | 6  |                      | 12 |                      |    |
| 29       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 30       | 8 plants.....                               | 1913  | 63                   | 66.8                              | .291                            | 18.94                              | 6                                              | 9                    |                 |    | 4                    | 36 | 8                    |    |
|          |                                             | 1914  | 58                   | 67.4                              | .271                            | 17.86                              |                                                | 12                   |                 |    | 2                    | 44 |                      |    |
| 31       | 9 plants.....                               | 1914  | 61                   | 66.4                              | .274                            | 17.74                              | 3                                              | 12                   |                 |    | 2                    | 44 |                      |    |
| 32       |                                             | 1915  | 61                   | 66.4                              | .266                            | 17.08                              | 3                                              | 12                   |                 |    | 2                    | 44 |                      |    |
| 33       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 34       | 6 plants.....                               | 1913  | 32                   | 74.8                              | .237                            | 17.60                              |                                                |                      |                 |    |                      | 18 | 14                   |    |
|          |                                             | 1914  | 25                   | 72.0                              | .222                            | 15.95                              |                                                |                      |                 |    |                      | 25 |                      |    |
| 35       |                                             | 1915  | 26                   | 72.5                              | .237                            | 17.14                              |                                                |                      |                 |    |                      | 24 | 2                    |    |
| 36       | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 37       | 2 plants.....                               | 1913  | 8                    | 72.0                              | .203                            | 14.58                              |                                                |                      |                 |    |                      | 8  |                      |    |
|          |                                             | 1914  | 7                    | 72.0                              | .202                            | 14.53                              |                                                |                      |                 |    |                      | 7  |                      |    |
| 38       | 3 plants.....                               | 1914  | 9                    | 72.0                              | .198                            | 14.25                              |                                                |                      |                 |    |                      | 9  |                      |    |
| 39       |                                             | 1915  | 9                    | 72.0                              | .190                            | 13.66                              |                                                |                      |                 |    |                      | 9  |                      |    |
| 40       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
|          | 18 plants.....                              | 1913  | 111                  | 69.5                              | .267                            | 18.17                              | 6                                              | 9                    |                 |    | 10                   | 62 | 24                   |    |
|          |                                             | 1914  | 98                   | 68.7                              | .249                            | 16.83                              |                                                | 12                   |                 | 6  | 2                    | 76 | 2                    |    |
| 42       | 20 plants.....                              | 1914  | 113                  | 68.4                              | .256                            | 17.23                              | 3                                              | 12                   |                 | 6  | 2                    | 90 |                      |    |
| 43       |                                             | 1915  | 114                  | 68.5                              | .258                            | 17.35                              | 3                                              | 12                   |                 | 6  | 2                    | 89 | 2                    |    |



AND FULL-TIME WEEKLY EARNINGS IN EACH DISTRICT, BY YEARS,  
MILLS—Continued.

[illegible]

TABLE J.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, 1913 TO 1915—*BLOOMING*

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |     |                      |       |   |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|-----|----------------------|-------|---|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72  | Over 72 and under 84 | 84    |   |
|          | Laborers:                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |       |   |
| 1        | Eastern—                                    | 1913  | 19                   | 66.3                              | \$0.162                         | \$10.66                            |                                                |                      | 3               |    | 5                    | 7   |                      | 2     | 3 |
| 2        | 3 plants.....                               | 1914  | 5                    | 64.2                              | .160                            | 10.18                              | 1                                              |                      |                 |    | 4                    |     |                      |       |   |
| 3        | 3 plants.....                               | 1914  | 12                   | 61.3                              | .172                            | 10.54                              | 1                                              |                      |                 | 8  | 1                    | 2   |                      |       |   |
| 4        |                                             | 1915  | 12                   | 69.3                              | .154                            | 10.60                              | 1                                              |                      |                 |    | 1                    | 10  |                      |       |   |
| 5        | Pittsburgh—                                 | 1913  | 147                  | 73.1                              | .192                            | 14.01                              |                                                |                      |                 |    | 39                   | 77  | 14                   | 17    |   |
| 6        | 8 plants.....                               | 1914  | 133                  | 72.1                              | .192                            | 13.84                              |                                                |                      |                 |    | 30                   | 89  | 8                    | 6     |   |
| 7        | 9 plants.....                               | 1914  | 136                  | 72.0                              | .192                            | 13.84                              |                                                |                      |                 |    | 31                   | 91  | 8                    | 6     |   |
| 8        |                                             | 1915  | 158                  | 72.8                              | .192                            | 14.01                              |                                                |                      |                 |    | 33                   | 88  | 31                   | 6     |   |
| 9        | G. L. and M. W.—                            | 1913  | 102                  | 74.4                              | .190                            | 14.13                              |                                                |                      |                 | 4  | 12                   | 49  | 23                   | 14    |   |
| 10       | 6 plants.....                               | 1914  | 56                   | 72.0                              | .192                            | 13.79                              |                                                |                      |                 |    | 13                   | 37  | 2                    | 2     |   |
| 11       | 7 plants.....                               | 1914  | 96                   | 72.0                              | .190                            | 13.67                              |                                                |                      |                 | 2  | 13                   | 77  | 2                    | 2     |   |
| 12       |                                             | 1915  | 102                  | 72.0                              | .190                            | 13.64                              |                                                |                      |                 | 4  | 13                   | 77  | 6                    | 2     |   |
| 13       | Southern—                                   | 1913  | 24                   | 73.0                              | .138                            | 10.07                              |                                                |                      |                 |    |                      | 20  | 4                    |       |   |
| 14       | 2 plants.....                               | 1914  | 18                   | 73.3                              | .141                            | 10.29                              |                                                |                      |                 |    |                      | 14  | 4                    |       |   |
| 15       | 3 plants.....                               | 1914  | 23                   | 74.1                              | .148                            | 10.97                              |                                                |                      |                 | 1  |                      | 15  | 4                    | 3     |   |
| 16       |                                             | 1915  | 18                   | 71.3                              | .140                            | 9.95                               |                                                |                      |                 | 1  |                      | 17  |                      |       |   |
| 17       | Total—                                      | 1913  | 292                  | 73.1                              | .185                            | 13.51                              |                                                | 3                    |                 | 9  | 58                   | 146 | 43                   | 33    |   |
| 18       | 19 plants.....                              | 1914  | 212                  | 72.0                              | .187                            | 13.44                              | 1                                              |                      |                 | 2  | 47                   | 140 | 14                   | 8     |   |
| 19       | 22 plants.....                              | 1914  | 267                  | 71.7                              | .187                            | 13.39                              | 1                                              |                      |                 | 11 | 45                   | 185 | 14                   | 11    |   |
| 20       |                                             | 1915  | 290                  | 72.3                              | .187                            | 13.49                              | 1                                              |                      |                 | 5  | 47                   | 192 | 37                   | 8     |   |
| 21       | Unclassified—productive:                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |       |   |
| 22       | Eastern—                                    | 1914  | 66                   | 65.5                              | .229                            | 15.18                              | 1                                              | 4                    |                 | 14 | 25                   | 22  |                      |       |   |
| 23       | 3 plants.....                               | 1915  | 70                   | 67.7                              | .225                            | 15.34                              |                                                | 3                    |                 | 12 | 19                   | 34  |                      | 2     |   |
| 24       | Pittsburgh—                                 | 1914  | 208                  | 72.7                              | .227                            | 16.40                              |                                                | 9                    |                 | 6  | 4                    | 119 | 47                   | 23    |   |
| 25       | 10 plants.....                              | 1915  | 232                  | 72.8                              | .224                            | 16.22                              |                                                | 9                    |                 | 9  | 6                    | 123 | 67                   | 18    |   |
| 26       | G. L. and M. W.—                            | 1914  | 121                  | 73.2                              | .214                            | 15.52                              |                                                |                      |                 |    | 1                    | 104 | 6                    | 10    |   |
| 27       | 7 plants.....                               | 1915  | 126                  | 73.4                              | .216                            | 15.85                              |                                                |                      |                 |    | 5                    | 101 | 9                    | 11    |   |
| 28       | Southern—                                   | 1914  | 50                   | 74.9                              | .192                            | 14.34                              |                                                |                      |                 |    |                      | 38  |                      | 12    |   |
| 29       | 3 plants.....                               | 1915  | 53                   | 76.1                              | .191                            | 14.51                              |                                                |                      |                 |    |                      | 33  | 4                    | 16    |   |
| 30       | Total—                                      | 1914  | 445                  | 72.0                              | .220                            | 15.75                              | 1                                              | 13                   |                 | 20 | 30                   | 283 | 53                   | 45    |   |
| 31       | 23 plants.....                              | 1915  | 481                  | 72.6                              | .219                            | 15.81                              |                                                | 12                   |                 | 21 | 30                   | 291 | 80                   | 47    |   |
| 32       | Unclassified—nonproductive:                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |       |   |
| 33       | Eastern—                                    | 1914  | 88                   | 68.8                              | .216                            | 14.69                              | 3                                              | 15                   |                 | 4  | 16                   | 28  | 10                   | 12    |   |
| 34       | 3 plants.....                               | 1915  | 83                   | 67.4                              | .233                            | 15.41                              |                                                | 26                   |                 | 2  | 15                   | 15  | 11                   | 14    |   |
| 35       | Pittsburgh—                                 | 1914  | 484                  | 73.6                              | .223                            | 16.39                              | 3                                              |                      | 1               | 7  | 36                   | 327 | 53                   | 1 57  |   |
| 36       | 9 plants.....                               | 1915  | 586                  | 73.5                              | .221                            | 16.21                              | 3                                              |                      | 1               | 8  | 51                   | 394 | 70                   | 2 59  |   |
| 37       | G. L. and M. W.—                            | 1914  | 269                  | 72.1                              | .226                            | 16.20                              |                                                |                      | 15              | 2  | 26                   | 197 | 6                    | 23    |   |
| 38       | 7 plants.....                               | 1915  | 311                  | 72.3                              | .224                            | 16.14                              |                                                |                      | 7               | 12 | 30                   | 223 | 6                    | 33    |   |
| 39       | Southern—                                   | 1914  | 132                  | 73.6                              | .195                            | 14.42                              |                                                |                      |                 | 44 | 1                    | 25  |                      | 62    |   |
| 40       | 3 plants.....                               | 1915  | 132                  | 74.5                              | .186                            | 13.95                              |                                                |                      |                 | 37 | 1                    | 29  |                      | 65    |   |
| 39       | Total—                                      | 1914  | 973                  | 72.7                              | .219                            | 15.92                              | 6                                              | 15                   | 16              | 57 | 79                   | 577 | 69                   | 1 154 |   |
| 40       | 22 plants.....                              | 1915  | 1,112                | 72.8                              | .218                            | 15.86                              | 3                                              | 26                   | 8               | 59 | 97                   | 661 | 87                   | 2 171 |   |

¹ Including 3 employees whose full-time hours per week were 91.

AND FULL-TIME WEEKLY EARNINGS IN EACH DISTRICT, BY YEARS,  
MILLS—Concluded.

| Employees whose rates of wages per hour were— |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | Line<br>No. |
|-----------------------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------|-------------|
| 12 and<br>under<br>14<br>cents.               | 14 and<br>under<br>16<br>cents. | 16 and<br>under<br>18<br>cents. | 18 and<br>under<br>20<br>cents. | 20 and<br>under<br>25<br>cents. | 25 and<br>under<br>30<br>cents. | 30 and<br>under<br>40<br>cents. | 40 and<br>under<br>50<br>cents. | 50 and<br>under<br>60<br>cents. | 60 and<br>under<br>70<br>cents. | 70 cents<br>and<br>over. |             |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | 1           |
|                                               | 4                               | 12                              | 3                               |                                 |                                 |                                 |                                 |                                 |                                 |                          | 2           |
|                                               | 1                               | 4                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | 3           |
|                                               | 1                               | 11                              |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | 4           |
|                                               | 10                              | 1                               | 1                               |                                 |                                 |                                 |                                 |                                 |                                 |                          | 5           |
|                                               |                                 | 33                              | 79                              | 35                              |                                 |                                 |                                 |                                 |                                 |                          | 6           |
|                                               |                                 | 27                              | 79                              | 27                              |                                 |                                 |                                 |                                 |                                 |                          | 7           |
|                                               |                                 | 27                              | 79                              | 30                              |                                 |                                 |                                 |                                 |                                 |                          | 8           |
|                                               |                                 | 29                              | 97                              | 32                              |                                 |                                 |                                 |                                 |                                 |                          | 9           |
|                                               |                                 | 19                              | 76                              | 7                               |                                 |                                 |                                 |                                 |                                 |                          | 10          |
|                                               |                                 | 8                               | 43                              | 5                               |                                 |                                 |                                 |                                 |                                 |                          | 11          |
|                                               |                                 | 8                               | 83                              | 5                               |                                 |                                 |                                 |                                 |                                 |                          | 12          |
|                                               |                                 | 12                              | 84                              | 6                               |                                 |                                 |                                 |                                 |                                 |                          | 13          |
| 8                                             | 16                              |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | 14          |
| 8                                             | 6                               | 4                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | 15          |
| 8                                             | 6                               | 9                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | 16          |
| 7                                             | 8                               | 3                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | 17          |
| 8                                             | 20                              | 64                              | 158                             | 42                              |                                 |                                 |                                 |                                 |                                 |                          | 18          |
| 8                                             | 7                               | 43                              | 122                             | 32                              |                                 |                                 |                                 |                                 |                                 |                          | 19          |
| 8                                             | 7                               | 55                              | 162                             | 35                              |                                 |                                 |                                 |                                 |                                 |                          | 20          |
| 7                                             | 18                              | 45                              | 182                             | 38                              |                                 |                                 |                                 |                                 |                                 |                          | 21          |
|                                               |                                 | 15                              | 9                               | 21                              | 13                              | 4                               | 4                               |                                 |                                 |                          | 22          |
|                                               | 5                               | 26                              | 7                               | 12                              | 4                               | 12                              | 4                               |                                 |                                 |                          | 23          |
|                                               |                                 | 8                               | 41                              | 114                             | 31                              | 14                              |                                 |                                 |                                 |                          | 24          |
|                                               |                                 | 8                               | 73                              | 102                             | 35                              | 10                              | 4                               |                                 |                                 |                          | 25          |
|                                               |                                 | 1                               | 39                              | 74                              | 4                               | 3                               |                                 |                                 |                                 |                          | 26          |
|                                               |                                 | 3                               | 28                              | 84                              | 8                               | 3                               |                                 |                                 |                                 |                          | 27          |
|                                               | 13                              | 3                               | 18                              | 10                              | 4                               | 2                               |                                 |                                 |                                 |                          | 28          |
|                                               | 15                              | 5                               | 18                              | 7                               | 6                               | 2                               |                                 |                                 |                                 |                          | 29          |
|                                               | 13                              | 27                              | 107                             | 219                             | 52                              | 23                              | 4                               |                                 |                                 |                          | 30          |
|                                               | 20                              | 42                              | 126                             | 206                             | 53                              | 27                              | 8                               |                                 |                                 |                          | 31          |
|                                               |                                 | 13                              | 18                              | 31                              | 23                              | 3                               |                                 |                                 |                                 |                          | 32          |
|                                               | 4                               | 6                               | 15                              | 25                              | 24                              | 7                               | 2                               |                                 |                                 |                          | 33          |
|                                               |                                 | 2                               | 40                              | 346                             | 62                              | 31                              | 3                               |                                 |                                 |                          | 34          |
|                                               |                                 | 3                               | 40                              | 442                             | 63                              | 35                              | 3                               |                                 |                                 |                          | 35          |
|                                               |                                 |                                 | 93                              | 125                             | 20                              | 29                              | 2                               |                                 |                                 |                          | 36          |
|                                               |                                 | 6                               | 107                             | 131                             | 34                              | 31                              | 2                               |                                 |                                 |                          | 37          |
| 1                                             | 16                              | 35                              | 56                              | 10                              | 6                               | 7                               | 1                               |                                 |                                 |                          | 38          |
|                                               | 15                              | 86                              | 10                              | 7                               | 6                               | 7                               | 1                               |                                 |                                 |                          | 39          |
| 1                                             | 16                              | 50                              | 207                             | 512                             | 111                             | 70                              | 6                               |                                 |                                 |                          | 40          |
|                                               | 19                              | 101                             | 172                             | 605                             | 127                             | 80                              | 8                               |                                 |                                 |                          |             |

\* Including 2 employees whose full-time hours per week were 91.

## PLATE MILLS.<sup>1</sup>

### SUMMARY.

The average rate of wages or earnings per hour in 1915 in the plate-mill department was from 1 to 18 per cent higher than in any one of the five years preceding, and as the average full-time hours per week were practically stationary during the period, the full-time weekly earnings followed the course of hourly earnings. These facts are shown in the table of relative numbers for "All occupations," Table 29.

The most significant facts appearing in this chapter concerning wages and hours of labor of plate-mill employees for the years 1910 to 1915 are summarized by means of averages and percentages in Table 28. The information for 1915 represents the 2,245 employees of 20 plate mills in 13 plants. These 20 mills are capable of producing 37 per cent of the total tonnage of all plate mills in the United States. Fifteen of these mills, which range in size from 72 to 152 inches, are sheared-plate mills, where the edges are not rolled and must be sheared off, while the remaining 5 are 48-inch universal mills where the edges are rolled, hence only the ends need be cut. Of the 2,245 employees 1,172 are in the 16 principal productive occupations reported for the years 1910 to 1913 and the remaining 1,073 are in the unclassified productive and nonproductive groups reported for the years 1914 and 1915 only.

In this summary table occupations are grouped according to the wages paid, beginning with the lowest-paid group, and the occupations in each group are presented in alphabetical order. Classified full-time hours per week and rates of wages per hour are shown by percentages which were computed from the actual figures given in Table K.

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<sup>1</sup> Summary figures relating to this department are given with figures for other departments of the iron and steel industry on pages 7 to 26; an account of the volume of employment in this and other departments from July, 1913, to June, 1915, is given on pages 26 to 55; and an explanation of the scope of the investigation and of the methods employed is given on pages 55 to 59.

TABLE 28.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1915—PLATE MILLS.

[The figures for each group of years are for identical plants.]

| Occupation, and number of plants.       | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |    |                      |       | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                   |         | Average full-time weekly earnings. |
|-----------------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|----------------------|----|----------------------|-------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|-------------------|---------|------------------------------------|
|                                         |       |                      |                                   | 60 and under.                                              | Over 60 and under 72 | 72 | Over 72 and under 84 | 84    |                                 | 12 and under 14 cts.                                | 14 and under 16 cts. | 16 and under 18 cts. | 18 and under 20 cts. | 20 cts. and over. |         |                                    |
|                                         |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |         |                                    |
| Laborers:                               |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |         |                                    |
| 11 plants.....                          | 1910  | 355                  | 66.8                              | 25                                                         | 58                   | 10 | 1                    | 7     | \$0.159                         | 18                                                  | 10                   | 71                   | 1                    | .....             | \$10.68 |                                    |
|                                         | 1911  | 274                  | 66.2                              | 26                                                         | 52                   | 18 | 3                    | 1     | .158                            | 24                                                  | 10                   | 67                   | .....                | .....             | 10.51   |                                    |
|                                         | 1912  | 287                  | 68.3                              | 25                                                         | 45                   | 17 | 7                    | 16    | .160                            | 26                                                  | 7                    | 65                   | 1                    | .....             | 11.04   |                                    |
| 11 plants.....                          | 1912  | 339                  | 68.9                              | 22                                                         | 36                   | 31 | 6                    | 15    | .161                            | 22                                                  | 9                    | 66                   | 3                    | .....             | 11.17   |                                    |
|                                         | 1913  | 349                  | 69.3                              | 22                                                         | 36                   | 32 | 3                    | 27    | .181                            | 25                                                  | 23                   | 20                   | 32                   | .....             | 12.62   |                                    |
| 10 plants.....                          | 1913  | 228                  | 68.5                              | 34                                                         | 29                   | 25 | 4                    | 18    | .175                            | .....                                               | 37                   | 18                   | 25                   | 21                | 12.09   |                                    |
|                                         | 1914  | 190                  | 67.9                              | 28                                                         | 31                   | 25 | 14                   | 3     | .174                            | 3                                                   | 35                   | 21                   | 18                   | 23                | 11.93   |                                    |
| 12 plants.....                          | 1914  | 216                  | 67.6                              | 27                                                         | 30                   | 27 | 13                   | 3     | .174                            | 2                                                   | 31                   | 31                   | 16                   | 20                | 11.85   |                                    |
|                                         | 1915  | 208                  | 66.7                              | 36                                                         | 29                   | 19 | 13                   | 3     | .174                            | 2                                                   | 31                   | 29                   | 17                   | 20                | 11.66   |                                    |
|                                         |       |                      |                                   |                                                            |                      |    |                      |       |                                 | Under 16 cts.                                       | 16 and under 20 cts. | 20 and under 30 cts. | 30 and under 40 cts. | 40 and over.      |         |                                    |
| Heaters' helpers:                       |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |         |                                    |
| 10 plants.....                          | 1910  | 111                  | 69.5                              | .....                                                      | 67                   | 28 | .....                | 5     | .243                            | 9                                                   | 30                   | 45                   | 5                    | 11                | 16.98   |                                    |
|                                         | 1911  | 108                  | 67.3                              | 4                                                          | 66                   | 30 | .....                | 1     | .227                            | 10                                                  | 31                   | 48                   | 5                    | 7                 | 15.31   |                                    |
|                                         | 1912  | 101                  | 67.5                              | 3                                                          | 64                   | 30 | 3                    | ..... | .247                            | .....                                               | 30                   | 56                   | 7                    | 7                 | 16.71   |                                    |
| 10 plants.....                          | 1912  | 113                  | 68.7                              | 3                                                          | 61                   | 25 | 8                    | 4     | .243                            | .....                                               | 34                   | 54                   | 6                    | 6                 | 16.74   |                                    |
|                                         | 1913  | 107                  | 68.7                              | .....                                                      | 65                   | 23 | 12                   | ..... | .252                            | .....                                               | 32                   | 45                   | 13                   | 10                | 17.50   |                                    |
| 10 plants.....                          | 1913  | 105                  | 68.5                              | .....                                                      | 72                   | 11 | 16                   | ..... | .252                            | .....                                               | 23                   | 55                   | 11                   | 10                | 17.42   |                                    |
|                                         | 1914  | 103                  | 68.2                              | .....                                                      | 76                   | 8  | 17                   | ..... | .239                            | 9                                                   | 19                   | 57                   | 11                   | 4                 | 16.23   |                                    |
| 12 plants.....                          | 1914  | 112                  | 67.7                              | .....                                                      | 76                   | 9  | 15                   | ..... | .247                            | 6                                                   | 17                   | 62                   | 12                   | 4                 | 16.68   |                                    |
|                                         | 1915  | 109                  | 67.6                              | .....                                                      | 76                   | 8  | 16                   | ..... | .264                            | 15                                                  | 11                   | 40                   | 25                   | 9                 | 18.04   |                                    |
| Hook men, sheared-plate mills:          |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |         |                                    |
| 9 plants.....                           | 1910  | 73                   | 68.3                              | .....                                                      | 68                   | 32 | .....                | ..... | .262                            | 8                                                   | 25                   | 37                   | 27                   | 3                 | 17.88   |                                    |
|                                         | 1911  | 72                   | 68.1                              | .....                                                      | 58                   | 42 | .....                | ..... | .246                            | 4                                                   | 42                   | 29                   | 17                   | 8                 | 16.81   |                                    |
|                                         | 1912  | 69                   | 68.3                              | .....                                                      | 57                   | 43 | .....                | ..... | .279                            | .....                                               | 30                   | 35                   | 17                   | 17                | 19.07   |                                    |
| 9 plants.....                           | 1912  | 72                   | 68.5                              | .....                                                      | 53                   | 47 | .....                | ..... | .276                            | .....                                               | 28                   | 39                   | 17                   | 17                | 18.90   |                                    |
|                                         | 1913  | 75                   | 68.6                              | .....                                                      | 51                   | 49 | .....                | ..... | .310                            | .....                                               | 16                   | 39                   | 21                   | 24                | 21.35   |                                    |
| 9 plants.....                           | 1913  | 76                   | 68.4                              | .....                                                      | 57                   | 43 | .....                | ..... | .313                            | .....                                               | 11                   | 45                   | 21                   | 24                | 21.55   |                                    |
|                                         | 1914  | 65                   | 67.9                              | .....                                                      | 66                   | 34 | .....                | ..... | .277                            | 6                                                   | 9                    | 60                   | 12                   | 12                | 18.95   |                                    |
| 11 plants.....                          | 1914  | 74                   | 68.2                              | .....                                                      | 57                   | 43 | .....                | ..... | .294                            | 5                                                   | 4                    | 54                   | 26                   | 11                | 20.27   |                                    |
|                                         | 1915  | 76                   | 68.0                              | .....                                                      | 58                   | 42 | .....                | ..... | .314                            | 5                                                   | 8                    | 42                   | 20                   | 25                | 21.57   |                                    |
| Roll hands, other, sheared-plate mills: |       |                      |                                   |                                                            |                      |    |                      |       |                                 |                                                     |                      |                      |                      |                   |         |                                    |
| 6 plants.....                           | 1910  | 14                   | 68.0                              | .....                                                      | 71                   | 29 | .....                | ..... | .263                            | .....                                               | 43                   | 14                   | 43                   | .....             | 17.71   |                                    |
|                                         | 1911  | 14                   | 68.9                              | .....                                                      | 43                   | 57 | .....                | ..... | .242                            | 14                                                  | 14                   | 57                   | .....                | 14                | 16.64   |                                    |
|                                         | 1912  | 14                   | 68.9                              | .....                                                      | 43                   | 57 | .....                | ..... | .279                            | 14                                                  | 14                   | 36                   | 21                   | 14                | 19.16   |                                    |
| 6 plants.....                           | 1912  | 16                   | 69.3                              | .....                                                      | 37                   | 63 | .....                | ..... | .269                            | 13                                                  | 19                   | 38                   | 19                   | 13                | 18.54   |                                    |
|                                         | 1913  | 16                   | 69.3                              | .....                                                      | 37                   | 63 | .....                | ..... | .280                            | .....                                               | 25                   | 31                   | 31                   | 13                | 19.31   |                                    |
| 7 plants.....                           | 1913  | 20                   | 69.1                              | .....                                                      | 50                   | 50 | .....                | ..... | .265                            | .....                                               | 30                   | 35                   | 25                   | 10                | 18.28   |                                    |
|                                         | 1914  | 18                   | 68.7                              | .....                                                      | 56                   | 44 | .....                | ..... | .246                            | 17                                                  | 17                   | 39                   | 28                   | .....             | 17.08   |                                    |
| 9 plants.....                           | 1914  | 24                   | 67.4                              | .....                                                      | 67                   | 33 | .....                | ..... | .257                            | 8                                                   | 13                   | 50                   | 25                   | 4                 | 17.42   |                                    |
|                                         | 1915  | 24                   | 67.4                              | .....                                                      | 58                   | 42 | .....                | ..... | .268                            | 8                                                   | 25                   | 25                   | 33                   | 8                 | 18.12   |                                    |

<sup>1</sup> Including 5 per cent whose full-time hours per week were 91.

<sup>2</sup> Including 3 per cent whose full-time hours per week were 91.

<sup>3</sup> Including 4 per cent whose full-time hours per week were 91.

TABLE 28.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1915—PLATE MILLS—Continued.

| Occupation, and number of plants.                               | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |    |                      | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                      | Average full-time weekly earnings. |         |
|-----------------------------------------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|----------------------|----|----------------------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|----------------------|------------------------------------|---------|
|                                                                 |       |                      |                                   | 60 and under.                                              | Over 60 and under 72 | 72 | Over 72 and under 84 |                                 | Under 16 cts.                                       | 16 and under 20 cts. | 20 and under 30 cts. | 30 and under 40 cts. | 40 cts. and over.    |                                    |         |
|                                                                 |       |                      |                                   |                                                            |                      |    |                      |                                 |                                                     |                      |                      |                      |                      |                                    |         |
| Shearmen's helpers:<br>11 plants.....                           | 1910  | 460                  | 68.4                              | 2                                                          | 57                   | 42 | .....                | .....                           | \$0.215                                             | 10                   | 47                   | 29                   | 14                   | (1)                                | \$14.71 |
|                                                                 | 1911  | 429                  | 68.4                              | 4                                                          | 41                   | 56 | .....                | .....                           | .206                                                | 14                   | 53                   | 27                   | 6                    | (1)                                | 14.20   |
|                                                                 | 1912  | 432                  | 68.6                              | 3                                                          | 39                   | 58 | .....                | .....                           | .223                                                | 4                    | 56                   | 20                   | 18                   | 1                                  | 15.42   |
| 11 plants.....                                                  | 1912  | 392                  | 68.3                              | 2                                                          | 42                   | 55 | .....                | .....                           | .226                                                | 4                    | 53                   | 24                   | 18                   | 2                                  | 15.59   |
|                                                                 | 1913  | 393                  | 68.4                              | 2                                                          | 43                   | 56 | .....                | .....                           | .253                                                | 6                    | 17                   | 50                   | 23                   | 5                                  | 17.47   |
| 11 plants.....                                                  | 1913  | 425                  | 68.7                              | (1)                                                        | 42                   | 57 | .....                | .....                           | .250                                                | 6                    | 17                   | 52                   | 21                   | 4                                  | 17.25   |
|                                                                 | 1914  | 373                  | 68.2                              | 1                                                          | 48                   | 51 | .....                | .....                           | .240                                                | 8                    | 11                   | 60                   | 18                   | 3                                  | 16.53   |
| 13 plants.....                                                  | 1914  | 408                  | 68.2                              | (1)                                                        | 48                   | 52 | .....                | .....                           | .243                                                | 6                    | 12                   | 61                   | 18                   | 3                                  | 16.71   |
|                                                                 | 1915  | 406                  | 68.4                              | 1                                                          | 46                   | 50 | 2                    | .....                           | .260                                                | 12                   | 12                   | 46                   | 27                   | 3                                  | 17.89   |
| Unclassified—productive:<br>13 plants.....                      | 1914  | 565                  | 69.1                              | 1                                                          | 47                   | 45 | 5                    | 2                               | .229                                                | 13                   | 22                   | 51                   | 10                   | 4                                  | 15.91   |
|                                                                 | 1915  | 552                  | 69.1                              | 2                                                          | 46                   | 41 | 5                    | 2                               | .237                                                | 12                   | 22                   | 45                   | 16                   | 5                                  | 16.45   |
| Unclassified—nonproductive:<br>12 plants.....                   | 1914  | 551                  | 70.3                              | 16                                                         | 30                   | 33 | 7                    | 14                              | .219                                                | 7                    | 29                   | 53                   | 12                   | (1)                                | 15.29   |
|                                                                 | 1915  | 521                  | 69.8                              | 21                                                         | 22                   | 37 | 6                    | 14                              | .229                                                | 3                    | 28                   | 52                   | 16                   | 2                                  | 15.87   |
|                                                                 |       |                      |                                   |                                                            |                      |    |                      |                                 |                                                     | Under 20 cts.        | 20 and under 30 cts. | 30 and under 40 cts. | 40 and under 50 cts. | 50 cts. and over.                  |         |
| Charging-crane and charging-machine operators:<br>9 plants..... | 1910  | 41                   | 71.6                              | .....                                                      | 34                   | 56 | .....                | 10                              | .303                                                | .....                | 66                   | 20                   | 15                   | .....                              | 21.85   |
|                                                                 | 1911  | 39                   | 69.4                              | 8                                                          | 33                   | 56 | .....                | 3                               | .283                                                | 13                   | 44                   | 39                   | 3                    | 3                                  | 19.70   |
|                                                                 | 1912  | 38                   | 69.1                              | 8                                                          | 34                   | 58 | .....                | .....                           | .315                                                | 11                   | 37                   | 37                   | 11                   | 5                                  | 21.85   |
| 10 plants.....                                                  | 1912  | 42                   | 69.6                              | 5                                                          | 33                   | 33 | 29                   | .....                           | .315                                                | 10                   | 33                   | 43                   | 10                   | 5                                  | 21.98   |
|                                                                 | 1913  | 44                   | 70.3                              | .....                                                      | 32                   | 41 | 27                   | .....                           | .343                                                | 9                    | 32                   | 27                   | 27                   | 5                                  | 24.24   |
| 10 plants.....                                                  | 1913  | 46                   | 70.7                              | .....                                                      | 35                   | 39 | 26                   | .....                           | .339                                                | 4                    | 39                   | 26                   | 26                   | 4                                  | 24.07   |
|                                                                 | 1914  | 42                   | 70.3                              | .....                                                      | 38                   | 38 | 24                   | .....                           | .303                                                | 7                    | 43                   | 33                   | 17                   | .....                              | 21.47   |
| 12 plants.....                                                  | 1914  | 52                   | 70.2                              | .....                                                      | 42                   | 31 | 27                   | .....                           | .306                                                | 10                   | 38                   | 35                   | 17                   | .....                              | 21.69   |
|                                                                 | 1915  | 54                   | 70.3                              | .....                                                      | 41                   | 30 | 30                   | .....                           | .329                                                | 11                   | 37                   | 26                   | 20                   | 6                                  | 23.39   |
| Roll engineers:<br>11 plants.....                               | 1910  | 36                   | 71.5                              | .....                                                      | 28                   | 61 | 11                   | .....                           | .300                                                | 11                   | 45                   | 33                   | 6                    | 6                                  | 21.45   |
|                                                                 | 1911  | 35                   | 70.8                              | 6                                                          | 34                   | 37 | 17                   | 6                               | .290                                                | 9                    | 54                   | 29                   | 9                    | .....                              | 20.55   |
|                                                                 | 1912  | 35                   | 71.5                              | 6                                                          | 34                   | 34 | 17                   | 9                               | .289                                                | 9                    | 54                   | 29                   | 9                    | .....                              | 20.78   |
| 11 plants.....                                                  | 1912  | 37                   | 72.5                              | 5                                                          | 32                   | 27 | 22                   | 14                              | .287                                                | 8                    | 57                   | 27                   | 8                    | .....                              | 20.93   |
|                                                                 | 1913  | 36                   | 72.8                              | .....                                                      | 33                   | 31 | 22                   | 14                              | .309                                                | 8                    | 44                   | 42                   | 6                    | .....                              | 22.63   |
| 11 plants.....                                                  | 1913  | 34                   | 72.4                              | .....                                                      | 38                   | 29 | 18                   | 15                              | .308                                                | 9                    | 47                   | 32                   | 12                   | .....                              | 22.45   |
|                                                                 | 1914  | 32                   | 70.5                              | .....                                                      | 41                   | 41 | 13                   | 6                               | .305                                                | 3                    | 50                   | 41                   | 6                    | .....                              | 21.53   |
| 13 plants.....                                                  | 1914  | 38                   | 70.2                              | .....                                                      | 45                   | 34 | 16                   | 5                               | .307                                                | 3                    | 53                   | 34                   | 11                   | .....                              | 21.55   |
|                                                                 | 1915  | 39                   | 69.7                              | .....                                                      | 51                   | 28 | 15                   | 5                               | .309                                                | 13                   | 44                   | 28                   | 13                   | 3                                  | 21.58   |

<sup>1</sup> Less than one-half of 1 per cent.

TABLE 28.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1915—PLATE MILLS—Continued.

| Occupation, and number of plants.                              | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |     |                      | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                   | Average full-time weekly earnings. |
|----------------------------------------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|----------------------|-----|----------------------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|-------------------|------------------------------------|
|                                                                |       |                      |                                   | 60 and under.                                              | Over 60 and under 72 | 72  | Over 72 and under 84 |                                 | Under 20 cts.                                       | 20 and under 30 cts. | 30 and under 40 cts. | 40 and under 50 cts. | 50 cts. and over. |                                    |
| Roll hands, other, universal mills, 48-inch: 2 plants.....     | 1910  | 6                    | 70.0                              | .....                                                      | 33                   | 67  | .....                | \$0.296                         | .....                                               | 33                   | 67                   | .....                | .....             | \$20.93                            |
|                                                                | 1911  | 4                    | 72.0                              | .....                                                      | .....                | 100 | .....                | .299                            | .....                                               | 50                   | 50                   | .....                | .....             | 21.55                              |
|                                                                | 1912  | 4                    | 72.0                              | .....                                                      | .....                | 100 | .....                | .288                            | .....                                               | 50                   | 50                   | .....                | .....             | 20.74                              |
|                                                                | 1912  | 5                    | 69.6                              | 20                                                         | .....                | 80  | .....                | .277                            | .....                                               | 60                   | 40                   | .....                | .....             | 19.41                              |
|                                                                | 1913  | 6                    | 72.0                              | .....                                                      | .....                | 100 | .....                | .288                            | .....                                               | 67                   | 33                   | .....                | .....             | 20.74                              |
|                                                                | 1913  | 8                    | 70.3                              | .....                                                      | 25                   | 75  | .....                | .261                            | 25                                                  | 50                   | 25                   | .....                | .....             | 18.50                              |
|                                                                | 1914  | 8                    | 70.3                              | .....                                                      | 25                   | 75  | .....                | .241                            | 25                                                  | 75                   | .....                | .....                | .....             | 17.06                              |
|                                                                | 1914  | 10                   | 69.5                              | .....                                                      | 40                   | 60  | .....                | .266                            | 60                                                  | 20                   | .....                | .....                | .....             | 18.48                              |
|                                                                | 1915  | 9                    | 69.2                              | .....                                                      | 44                   | 56  | .....                | .310                            | 20                                                  | 33                   | 67                   | .....                | .....             | 21.46                              |
|                                                                | 1910  | 10                   | 69.2                              | .....                                                      | 60                   | 40  | .....                | .314                            | .....                                               | 40                   | 40                   | 20                   | .....             | 21.77                              |
|                                                                | 1911  | 9                    | 66.3                              | 22                                                         | 44                   | 33  | .....                | .296                            | .....                                               | 44                   | 44                   | 11                   | .....             | 19.80                              |
|                                                                | 1912  | 9                    | 66.3                              | 22                                                         | 44                   | 33  | .....                | .271                            | 44                                                  | .....                | 56                   | .....                | .....             | 18.12                              |
| Screw men, side rolls, universal mills, 48-inch: 4 plants..... | 1913  | 8                    | 68.6                              | .....                                                      | 50                   | 50  | .....                | .294                            | 50                                                  | .....                | 25                   | 13                   | 13                | 20.56                              |
|                                                                | 1913  | 6                    | 69.8                              | .....                                                      | 33                   | 67  | .....                | .332                            | 33                                                  | .....                | 33                   | 17                   | 17                | 23.47                              |
|                                                                | 1914  | 8                    | 68.6                              | .....                                                      | 50                   | 50  | .....                | .262                            | 50                                                  | .....                | 50                   | .....                | .....             | 18.27                              |
|                                                                | 1914  | 10                   | 68.1                              | .....                                                      | 60                   | 40  | .....                | .271                            | 40                                                  | .....                | 60                   | .....                | .....             | 18.69                              |
|                                                                | 1915  | 10                   | 68.1                              | .....                                                      | 60                   | 40  | .....                | .332                            | .....                                               | 40                   | 40                   | 20                   | .....             | 22.83                              |
|                                                                | 1910  | 70                   | 67.5                              | 3                                                          | 64                   | 33  | .....                | .378                            | 1                                                   | 33                   | 33                   | 10                   | 23                | 25.69                              |
|                                                                | 1911  | 66                   | 68.0                              | 6                                                          | 42                   | 52  | .....                | .356                            | 2                                                   | 38                   | 32                   | 11                   | 18                | 24.45                              |
|                                                                | 1912  | 68                   | 68.2                              | 6                                                          | 40                   | 54  | .....                | .386                            | .....                                               | 37                   | 28                   | 12                   | 24                | 26.61                              |
|                                                                | 1912  | 69                   | 68.3                              | 7                                                          | 38                   | 55  | .....                | .384                            | .....                                               | 38                   | 30                   | 9                    | 23                | 26.48                              |
|                                                                | 1913  | 69                   | 68.8                              | 3                                                          | 38                   | 59  | .....                | .413                            | 3                                                   | 16                   | 30                   | 23                   | 28                | 28.63                              |
|                                                                | 1913  | 69                   | 68.8                              | 1                                                          | 39                   | 59  | .....                | .415                            | 3                                                   | 14                   | 30                   | 25                   | 28                | 28.81                              |
|                                                                | 1914  | 64                   | 68.4                              | 2                                                          | 45                   | 53  | .....                | .402                            | 3                                                   | 28                   | 33                   | 6                    | 30                | 27.74                              |
| Table operators, sheared-plate mills: 9 plants.....            | 1914  | 73                   | 68.4                              | 1                                                          | 45                   | 53  | .....                | .406                            | 1                                                   | 26                   | 34                   | 10                   | 29                | 27.97                              |
|                                                                | 1915  | 73                   | 68.2                              | 4                                                          | 44                   | 52  | .....                | .436                            | 3                                                   | 16                   | 25                   | 25                   | 32                | 29.68                              |
|                                                                | 1910  | 26                   | 68.4                              | .....                                                      | 69                   | 31  | .....                | .318                            | .....                                               | 54                   | 15                   | 31                   | .....             | 21.64                              |
|                                                                | 1911  | 28                   | 68.1                              | .....                                                      | 57                   | 43  | .....                | .300                            | 11                                                  | 46                   | 25                   | 18                   | .....             | 20.44                              |
|                                                                | 1912  | 28                   | 68.1                              | .....                                                      | 57                   | 43  | .....                | .341                            | 14                                                  | 43                   | 7                    | 29                   | 7                 | 23.24                              |
|                                                                | 1912  | 30                   | 68.3                              | .....                                                      | 53                   | 47  | .....                | .334                            | 13                                                  | 47                   | 7                    | 27                   | 7                 | 22.85                              |
|                                                                | 1913  | 31                   | 68.4                              | .....                                                      | 52                   | 48  | .....                | .361                            | 7                                                   | 42                   | 3                    | 36                   | 13                | 24.74                              |
|                                                                | 1913  | 31                   | 68.2                              | .....                                                      | 55                   | 45  | .....                | .363                            | 3                                                   | 45                   | 3                    | 35                   | 13                | 24.87                              |
|                                                                | 1914  | 27                   | 67.7                              | .....                                                      | 63                   | 37  | .....                | .324                            | .....                                               | 52                   | 26                   | 11                   | 11                | 22.18                              |
|                                                                | 1914  | 31                   | 67.6                              | .....                                                      | 61                   | 39  | .....                | .317                            | 6                                                   | 45                   | 29                   | 10                   | 10                | 21.73                              |
|                                                                | 1915  | 32                   | 67.5                              | .....                                                      | 63                   | 37  | .....                | .332                            | 19                                                  | 19                   | 31                   | 22                   | 9                 | 22.63                              |

# 236 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

TABLE 28.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1915—PLATE MILLS—Concluded.

| Occupation, and number of plants.                | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |    |                      | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |               |                      |                      |                      | Average full-time weekly earnings. |                   |
|--------------------------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|----------------------|----|----------------------|---------------------------------|-----------------------------------------------------|---------------|----------------------|----------------------|----------------------|------------------------------------|-------------------|
|                                                  |       |                      |                                   | 60 and under.                                              | Over 60 and under 72 | 72 | Over 72 and under 84 |                                 | 84                                                  | Under 30 cts. | 30 and under 40 cts. | 40 and under 50 cts. | 50 and under 60 cts. |                                    | 60 cts. and over. |
|                                                  |       |                      |                                   |                                                            |                      |    |                      |                                 |                                                     |               |                      |                      |                      |                                    |                   |
| Heaters:                                         |       |                      |                                   |                                                            |                      |    |                      |                                 |                                                     |               |                      |                      |                      |                                    |                   |
| 11 plants.....                                   | 1910  | 56                   | 71.0                              |                                                            | 39                   | 54 |                      | 7                               | \$0.508                                             | 7             | 14                   | 21                   | 36                   | 21                                 | \$36.35           |
|                                                  | 1911  | 55                   | 69.1                              | 5                                                          | 38                   | 55 |                      | 2                               | .468                                                | 6             | 27                   | 20                   | 38                   | 9                                  | 32.46             |
|                                                  | 1912  | 53                   | 69.4                              | 6                                                          | 36                   | 53 | 6                    |                                 | .513                                                | 6             | 17                   | 11                   | 43                   | 21                                 | 35.78             |
| 11 plants.....                                   | 1912  | 55                   | 69.9                              | 4                                                          | 36                   | 33 | 27                   |                                 | .513                                                | 6             | 16                   | 13                   | 46                   | 20                                 | 36.02             |
|                                                  | 1913  | 54                   | 71.0                              |                                                            | 37                   | 35 | 28                   |                                 | .557                                                |               | 11                   | 32                   | 20                   | 37                                 | 39.93             |
| 11 plants.....                                   | 1913  | 54                   | 71.7                              |                                                            | 39                   | 26 | 35                   |                                 | .562                                                |               | 11                   | 24                   | 28                   | 37                                 | 40.59             |
|                                                  | 1914  | 52                   | 71.8                              |                                                            | 40                   | 29 | 23                   | 8                               | .520                                                | 4             | 21                   | 13                   | 37                   | 25                                 | 37.73             |
| 13 plants.....                                   | 1914  | 64                   | 70.5                              |                                                            | 48                   | 23 | 22                   | 6                               | .529                                                | 2             | 16                   | 17                   | 42                   | 23                                 | 37.63             |
|                                                  | 1915  | 61                   | 70.6                              |                                                            | 49                   | 21 | 23                   | 7                               | .557                                                | 3             | 16                   | 15                   | 21                   | 44                                 | 39.73             |
| Rollers, sheared-plate mills:                    |       |                      |                                   |                                                            |                      |    |                      |                                 |                                                     |               |                      |                      |                      |                                    |                   |
| 9 plants.....                                    | 1910  | 28                   | 68.4                              |                                                            | 71                   | 29 |                      |                                 | .712                                                | 21            | 7                    | 14                   | 7                    | 50                                 | 48.18             |
|                                                  | 1911  | 28                   | 68.1                              | 4                                                          | 54                   | 43 |                      |                                 | .607                                                | 21            | 7                    | 14                   | 11                   | 46                                 | 41.46             |
|                                                  | 1912  | 25                   | 68.5                              | 4                                                          | 48                   | 48 |                      |                                 | .729                                                | 4             | 8                    | 24                   | 8                    | 56                                 | 50.03             |
| 9 plants.....                                    | 1912  | 27                   | 68.7                              |                                                            | 48                   | 52 |                      |                                 | .711                                                | 4             | 7                    | 30                   | 7                    | 52                                 | 48.93             |
|                                                  | 1913  | 26                   | 68.5                              |                                                            | 50                   | 50 |                      |                                 | .718                                                | 12            | 8                    | 15                   | 8                    | 58                                 | 49.21             |
| 9 plants.....                                    | 1913  | 25                   | 68.5                              |                                                            | 52                   | 48 |                      |                                 | .755                                                |               | 8                    | 24                   | 8                    | 60                                 | 51.55             |
|                                                  | 1914  | 24                   | 68.1                              |                                                            | 58                   | 42 |                      |                                 | .691                                                |               | 21                   | 4                    | 8                    | 67                                 | 47.32             |
| 11 plants.....                                   | 1914  | 28                   | 68.0                              |                                                            | 57                   | 43 |                      |                                 | .703                                                |               | 18                   | 4                    | 11                   | 68                                 | 47.94             |
|                                                  | 1915  | 28                   | 67.9                              |                                                            | 57                   | 43 |                      |                                 | .734                                                | 7             | 14                   |                      |                      | 79                                 | 49.89             |
| Rollers, universal mills, 48-inch:               |       |                      |                                   |                                                            |                      |    |                      |                                 |                                                     |               |                      |                      |                      |                                    |                   |
| 4 plants.....                                    | 1910  | 8                    | 69.5                              |                                                            | 50                   | 50 |                      |                                 | .636                                                |               | 25                   |                      |                      | 75                                 | 44.22             |
|                                                  | 1911  | 7                    | 68.4                              | 14                                                         | 29                   | 57 |                      |                                 | .584                                                |               | 29                   |                      |                      | 71                                 | 40.31             |
|                                                  | 1912  | 6                    | 67.8                              | 17                                                         | 33                   | 50 |                      |                                 | .581                                                | 33            |                      |                      |                      | 67                                 | 39.78             |
|                                                  | 1913  | 6                    | 69.8                              |                                                            | 33                   | 67 |                      |                                 | .672                                                | 33            |                      |                      |                      | 67                                 | 47.81             |
| 4 plants.....                                    | 1913  | 6                    | 69.8                              |                                                            | 33                   | 67 |                      |                                 | .672                                                | 33            |                      |                      |                      | 67                                 | 47.81             |
|                                                  | 1914  | 6                    | 69.8                              |                                                            | 33                   | 67 |                      |                                 | .575                                                | 33            |                      |                      |                      | 67                                 | 40.78             |
| 5 plants.....                                    | 1914  | 8                    | 68.8                              |                                                            | 50                   | 50 |                      |                                 | .590                                                | 25            |                      |                      |                      | 75                                 | 41.08             |
|                                                  | 1915  | 8                    | 68.8                              |                                                            | 50                   | 50 |                      |                                 | .676                                                |               | 25                   |                      |                      | 75                                 | 47.10             |
| Screw men, main rolls, universal mills, 48-inch: |       |                      |                                   |                                                            |                      |    |                      |                                 |                                                     |               |                      |                      |                      |                                    |                   |
| 4 plants.....                                    | 1910  | 8                    | 69.5                              |                                                            | 50                   | 50 |                      |                                 | .470                                                |               | 25                   | 25                   | 25                   | 25                                 | 32.75             |
|                                                  | 1911  | 7                    | 66.6                              | 29                                                         | 29                   | 43 |                      |                                 | .421                                                | 14            | 14                   | 57                   | 14                   |                                    | 28.23             |
|                                                  | 1912  | 7                    | 66.6                              | 29                                                         | 29                   | 43 |                      |                                 | .407                                                | 29            | 29                   | 57                   | 14                   |                                    | 27.38             |
|                                                  | 1913  | 7                    | 70.1                              |                                                            | 29                   | 71 |                      |                                 | .460                                                | 29            |                      | 43                   |                      | 29                                 | 32.66             |
| 4 plants.....                                    | 1913  | 7                    | 70.1                              |                                                            | 29                   | 71 |                      |                                 | .460                                                | 29            |                      | 43                   |                      | 29                                 | 32.66             |
|                                                  | 1914  | 7                    | 70.1                              |                                                            | 29                   | 71 |                      |                                 | .392                                                | 29            | 14                   | 29                   | 29                   |                                    | 27.76             |
| 5 plants.....                                    | 1914  | 9                    | 69.2                              |                                                            | 44                   | 56 |                      |                                 | .386                                                | 22            | 33                   | 22                   | 22                   |                                    | 26.96             |
|                                                  | 1915  | 9                    | 69.2                              |                                                            | 44                   | 56 |                      |                                 | .451                                                | 22            | 22                   | 33                   |                      | 22                                 | 31.51             |
| Screw men, sheared-plate mills:                  |       |                      |                                   |                                                            |                      |    |                      |                                 |                                                     |               |                      |                      |                      |                                    |                   |
| 9 plants.....                                    | 1910  | 28                   | 68.6                              |                                                            | 64                   | 36 |                      |                                 | .421                                                | 14            | 36                   | 21                   | 14                   | 14                                 | 28.75             |
|                                                  | 1911  | 28                   | 68.6                              | 4                                                          | 46                   | 50 |                      |                                 | .393                                                | 25            | 36                   | 14                   | 18                   | 7                                  | 26.95             |
|                                                  | 1912  | 27                   | 68.8                              | 4                                                          | 44                   | 52 |                      |                                 | .446                                                | 19            | 33                   | 11                   | 15                   | 22                                 | 30.67             |
| 9 plants.....                                    | 1912  | 29                   | 69.0                              | 3                                                          | 41                   | 55 |                      |                                 | .435                                                | 24            | 31                   | 10                   | 14                   | 21                                 | 30.00             |
|                                                  | 1913  | 29                   | 69.0                              |                                                            | 45                   | 55 |                      |                                 | .482                                                | 7             | 45                   | 7                    |                      | 41                                 | 33.36             |
| plants.....                                      | 1913  | 27                   | 68.9                              |                                                            | 48                   | 52 |                      |                                 | .488                                                | 7             | 41                   | 7                    |                      | 44                                 | 33.78             |
|                                                  | 1914  | 27                   | 68.5                              |                                                            | 56                   | 44 |                      |                                 | .426                                                | 26            | 26                   | 22                   | 4                    | 22                                 | 29.46             |
| 10 plants.....                                   | 1914  | 28                   | 68.7                              |                                                            | 50                   | 50 |                      |                                 | .434                                                | 21            | 25                   | 29                   | 4                    | 21                                 | 30.08             |
|                                                  | 1915  | 26                   | 68.3                              |                                                            | 54                   | 46 |                      |                                 | .474                                                | 15            | 23                   | 19                   | 12                   | 31                                 | 32.61             |



Referring to the first occupation shown in Table 28, laborers, direct, comparison can be made of data for 11 identical plants for 1910 to 1912, inclusive, for a second group of 11 plants for 1912 and 1913, for 10 plants in 1913 and 1914, and for 12 plants in 1914 and 1915.

The first line of the table is read as follows: In 1910 the 11 plate mills for which reports were obtained employed 355 laborers whose average full-time hours of work were 66.8 per week. For 25 per cent of the 355 laborers the full-time hours per week were 60 and under; for 58 per cent, over 60 and under 72; for 10 per cent, 72; for 1 per cent, over 72 and under 84; and for 7 per cent the working hours were 84 per week. The average rate of wages or earnings per hour of laborers in the year considered (1910) was 15.9 cents. Of the total number, 18 per cent received 12 and under 14 cents per hour; 10 per cent, 14 and under 16 cents; 71 per cent, 16 and under 18 cents; and 1 per cent, 18 and under 20 cents per hour. The average full-time weekly earnings were \$10.68. The other lines of the table may be read in the same manner.

The lowest full-time weekly earnings in this department in 1915 were those of laborers, which were \$11.66, and the highest those of rollers in sheared-plate mills, which were \$49.89.

#### INDEX NUMBERS.

To aid in making a comparison of the actual data for the four years, which will give an accurate measure of the changes throughout the period, relative or index numbers have been computed from the averages given in Table 28 for full-time hours per week, rates of wages per hour, and full-time weekly earnings, for each occupation from 1910 to 1915, inclusive. Such figures appear in Table 29. These relative or index numbers are simply percentages for which the data for 1915 are taken as the base, or 100 per cent. The relative for each year is the per cent which the average for that year is of the average for 1915. For example, the relative full-time weekly earnings of charging-crane and charging-machine operators in 1910 were 94 as compared with 100 in 1915, that is, full-time weekly earnings of charging-crane and charging-machine operators in 1910 were 94 per cent of the full-time weekly earnings in this occupation in 1915. The method of computing relative numbers is explained on pages 65 to 67. Table 29 also shows for each occupation the per cent of increase or decrease in full-time hours per week, rates of wages per hour, and full-time weekly earnings in 1915, as compared with each specified year preceding. Thus, the full-time weekly earnings of charging-crane and charging-machine operators in 1915 were 6 per cent higher than in either 1910 or 1912, 18 per cent higher than in 1911, 4 per cent lower than in 1913, and 8 per cent higher than in 1914.

In other columns of the table is shown the per cent of change in each year as compared with the year immediately preceding. Thus, the full-time weekly earnings of charging-crane and charging-machine operators in 1911 were 10 per cent lower than in 1910; in 1912 11 per cent higher than in 1911, in 1913 11 per cent higher than in 1912; in 1914 11 per cent lower than in 1913, and in 1915 8 per cent higher than in 1914. The other occupations and items of the table can be studied in like manner. The percentages of increase and decrease are computed from the relative numbers.

TABLE 29.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATIONS—PLATE MILLS.

| Occupation and year.                                  | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|-------------------------------------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                                                       | Relative full-time hours per week. | Per cent of increase (+) or decrease (-) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (-) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (-) in— |                                                      |
|                                                       |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| <b>Charging-crane and charging-machine operators:</b> |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                                             | 103                                | -3                                           | .....                                                | 92                               | + 9                                          | .....                                                | 94                                  | + 6                                          | .....                                                |
| 1911.....                                             | 100                                | ( <sup>1</sup> )                             | -3                                                   | 86                               | +16                                          | - 7                                                  | 85                                  | +18                                          | -10                                                  |
| 1912.....                                             | 100                                | ( <sup>1</sup> )                             | ( <sup>1</sup> )                                     | 96                               | + 4                                          | +12                                                  | 94                                  | + 6                                          | +11                                                  |
| 1913.....                                             | 101                                | -1                                           | +1                                                   | 104                              | - 4                                          | + 8                                                  | 104                                 | - 4                                          | +11                                                  |
| 1914.....                                             | 100                                | ( <sup>1</sup> )                             | -1                                                   | 93                               | + 8                                          | -11                                                  | 93                                  | + 8                                          | -11                                                  |
| 1915.....                                             | 100                                | .....                                        | ( <sup>1</sup> )                                     | 100                              | .....                                        | + 8                                                  | 100                                 | .....                                        | + 8                                                  |
| <b>Heaters:</b>                                       |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                                             | 101                                | -1                                           | .....                                                | 94                               | + 6                                          | .....                                                | 93                                  | + 8                                          | .....                                                |
| 1911.....                                             | 98                                 | +2                                           | -3                                                   | 86                               | +16                                          | - 9                                                  | 83                                  | +20                                          | -11                                                  |
| 1912.....                                             | 98                                 | +2                                           | ( <sup>1</sup> )                                     | 95                               | + 5                                          | +10                                                  | 92                                  | + 9                                          | +11                                                  |
| 1913.....                                             | 100                                | ( <sup>1</sup> )                             | +2                                                   | 103                              | - 3                                          | + 8                                                  | 102                                 | - 2                                          | +11                                                  |
| 1914.....                                             | 100                                | ( <sup>1</sup> )                             | ( <sup>1</sup> )                                     | 95                               | + 5                                          | - 8                                                  | 95                                  | + 5                                          | - 7                                                  |
| 1915.....                                             | 100                                | .....                                        | ( <sup>1</sup> )                                     | 100                              | .....                                        | + 5                                                  | 100                                 | .....                                        | + 5                                                  |
| <b>Heaters' helpers:</b>                              |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                                             | 104                                | -4                                           | .....                                                | 94                               | + 6                                          | .....                                                | 97                                  | + 3                                          | .....                                                |
| 1911.....                                             | 100                                | ( <sup>1</sup> )                             | -4                                                   | 87                               | +15                                          | - 7                                                  | 87                                  | +15                                          | -10                                                  |
| 1912.....                                             | 101                                | -1                                           | +1                                                   | 95                               | + 5                                          | + 9                                                  | 95                                  | + 5                                          | + 9                                                  |
| 1913.....                                             | 101                                | -1                                           | ( <sup>1</sup> )                                     | 99                               | + 1                                          | + 4                                                  | 99                                  | + 1                                          | + 4                                                  |
| 1914.....                                             | 100                                | ( <sup>1</sup> )                             | -1                                                   | 94                               | + 6                                          | - 5                                                  | 93                                  | + 8                                          | - 6                                                  |
| 1915.....                                             | 100                                | .....                                        | ( <sup>1</sup> )                                     | 100                              | .....                                        | + 6                                                  | 100                                 | .....                                        | + 8                                                  |
| <b>Roll engineers:</b>                                |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                                             | 103                                | -3                                           | .....                                                | 97                               | + 3                                          | .....                                                | 100                                 | ( <sup>1</sup> )                             | .....                                                |
| 1911.....                                             | 102                                | -2                                           | -1                                                   | 94                               | + 6                                          | - 3                                                  | 95                                  | + 5                                          | - 5                                                  |
| 1912.....                                             | 103                                | -3                                           | +1                                                   | 93                               | + 8                                          | - 1                                                  | 96                                  | + 4                                          | + 1                                                  |
| 1913.....                                             | 103                                | -3                                           | ( <sup>1</sup> )                                     | 100                              | ( <sup>1</sup> )                             | + 8                                                  | 104                                 | - 4                                          | + 8                                                  |
| 1914.....                                             | 101                                | -1                                           | -2                                                   | 99                               | + 1                                          | - 1                                                  | 100                                 | ( <sup>1</sup> )                             | - 4                                                  |
| 1915.....                                             | 100                                | .....                                        | -1                                                   | 100                              | .....                                        | + 1                                                  | 100                                 | .....                                        | ( <sup>1</sup> )                                     |
| <b>Rollers, sheared-plate mills:</b>                  |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                                             | 101                                | -1                                           | .....                                                | 101                              | - 1                                          | .....                                                | 100                                 | ( <sup>1</sup> )                             | .....                                                |
| 1911.....                                             | 100                                | ( <sup>1</sup> )                             | -1                                                   | 86                               | +16                                          | -15                                                  | 86                                  | +16                                          | -14                                                  |
| 1912.....                                             | 101                                | -1                                           | +1                                                   | 104                              | - 4                                          | +21                                                  | 104                                 | - 4                                          | +21                                                  |
| 1913.....                                             | 101                                | -1                                           | ( <sup>1</sup> )                                     | 105                              | - 5                                          | + 1                                                  | 105                                 | - 5                                          | + 1                                                  |
| 1914.....                                             | 100                                | ( <sup>1</sup> )                             | -1                                                   | 96                               | + 4                                          | - 9                                                  | 96                                  | + 4                                          | - 9                                                  |
| 1915.....                                             | 100                                | .....                                        | ( <sup>1</sup> )                                     | 100                              | .....                                        | + 4                                                  | 100                                 | .....                                        | + 4                                                  |

<sup>1</sup> No change.

TABLE 29.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATIONS—PLATE MILLS—Continued.

| Occupation and year.                             | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|--------------------------------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                                                  | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in— |                                                      |
|                                                  |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| Screw men, sheared-plate mills:                  |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                                        | 101                                | —1                                           | ( )                                                  | 86                               | +12                                          | —                                                    | 89                                  | +12                                          | —                                                    |
| 1911.....                                        | 101                                | —1                                           | ( )                                                  | 83                               | +20                                          | —7                                                   | 84                                  | +19                                          | —6                                                   |
| 1912.....                                        | 101                                | —1                                           | ( )                                                  | 95                               | +5                                           | +14                                                  | 95                                  | +5                                           | +13                                                  |
| 1913.....                                        | 101                                | —1                                           | ( )                                                  | 105                              | —5                                           | +11                                                  | 106                                 | —6                                           | +12                                                  |
| 1914.....                                        | 101                                | —1                                           | ( )                                                  | 92                               | +9                                           | —12                                                  | 92                                  | +9                                           | —13                                                  |
| 1915.....                                        | 100                                |                                              | —1                                                   | 100                              |                                              | +9                                                   | 100                                 |                                              | +9                                                   |
| Table operators, sheared-plate mills:            |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                                        | 101                                | —1                                           | ( )                                                  | 92                               | +9                                           | —                                                    | 93                                  | +8                                           | —                                                    |
| 1911.....                                        | 101                                | —1                                           | ( )                                                  | 87                               | +15                                          | —5                                                   | 88                                  | +14                                          | —5                                                   |
| 1912.....                                        | 101                                | —1                                           | ( )                                                  | 99                               | +1                                           | +14                                                  | 99                                  | +1                                           | +13                                                  |
| 1913.....                                        | 101                                | —1                                           | ( )                                                  | 107                              | +7                                           | +8                                                   | 108                                 | —7                                           | +9                                                   |
| 1914.....                                        | 100                                | ( )                                          | —1                                                   | 96                               | +4                                           | —10                                                  | 96                                  | +4                                           | —11                                                  |
| 1915.....                                        | 100                                |                                              | ( )                                                  | 100                              |                                              | +4                                                   | 100                                 |                                              | +4                                                   |
| Hook men, sheared-plate mills:                   |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                                        | 101                                | —1                                           | ( )                                                  | 89                               | +12                                          | —                                                    | 89                                  | +12                                          | —                                                    |
| 1911.....                                        | 101                                | —1                                           | ( )                                                  | 83                               | +20                                          | —7                                                   | 83                                  | +20                                          | —7                                                   |
| 1912.....                                        | 101                                | —1                                           | ( )                                                  | 94                               | +6                                           | +13                                                  | 95                                  | +5                                           | +14                                                  |
| 1913.....                                        | 101                                | —1                                           | ( )                                                  | 106                              | —6                                           | +13                                                  | 107                                 | —7                                           | +13                                                  |
| 1914.....                                        | 100                                | ( )                                          | —1                                                   | 94                               | +6                                           | —11                                                  | 94                                  | +6                                           | —12                                                  |
| 1915.....                                        | 100                                |                                              | ( )                                                  | 100                              |                                              | +6                                                   | 100                                 |                                              | +6                                                   |
| Roll hands, other, sheared-plate mills:          |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                                        | 99                                 | +1                                           | —                                                    | 94                               | +6                                           | —                                                    | 91                                  | +10                                          | —                                                    |
| 1911.....                                        | 101                                | —1                                           | +2                                                   | 86                               | +16                                          | —9                                                   | 86                                  | +16                                          | —5                                                   |
| 1912.....                                        | 101                                | —1                                           | ( )                                                  | 99                               | +1                                           | +15                                                  | 99                                  | +1                                           | +15                                                  |
| 1913.....                                        | 101                                | —1                                           | ( )                                                  | 103                              | —3                                           | +4                                                   | 103                                 | —3                                           | +4                                                   |
| 1914.....                                        | 100                                | ( )                                          | —1                                                   | 96                               | +4                                           | —7                                                   | 96                                  | +4                                           | —7                                                   |
| 1915.....                                        | 100                                |                                              | ( )                                                  | 100                              |                                              | +4                                                   | 100                                 |                                              | +4                                                   |
| Rollers, universal mills, 48-inch:               |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                                        | 100                                | ( )                                          | —                                                    | 97                               | +3                                           | —                                                    | 95                                  | +5                                           | —                                                    |
| 1911.....                                        | 98                                 | +2                                           | —2                                                   | 89                               | +12                                          | —8                                                   | 86                                  | +16                                          | —9                                                   |
| 1912.....                                        | 97                                 | +3                                           | —1                                                   | 83                               | +14                                          | —1                                                   | 85                                  | +18                                          | —1                                                   |
| 1913.....                                        | 100                                | ( )                                          | +3                                                   | 102                              | —2                                           | +16                                                  | 102                                 | —2                                           | +20                                                  |
| 1914.....                                        | 100                                | ( )                                          | ( )                                                  | 87                               | +15                                          | —15                                                  | 87                                  | +15                                          | —15                                                  |
| 1915.....                                        | 100                                |                                              | ( )                                                  | 100                              |                                              | +15                                                  | 100                                 |                                              | +15                                                  |
| Screw men, main rolls, universal mills, 48-inch: |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                                        | 99                                 | +1                                           | —                                                    | 103                              | —3                                           | —                                                    | 101                                 | —1                                           | —                                                    |
| 1911.....                                        | 95                                 | +5                                           | —4                                                   | 92                               | +9                                           | —11                                                  | 87                                  | +15                                          | —14                                                  |
| 1912.....                                        | 95                                 | +5                                           | ( )                                                  | 89                               | +12                                          | —3                                                   | 85                                  | +18                                          | —2                                                   |
| 1913.....                                        | 100                                | ( )                                          | +5                                                   | 100                              | ( )                                          | +12                                                  | 101                                 | —1                                           | +19                                                  |
| 1914.....                                        | 100                                | ( )                                          | ( )                                                  | 86                               | +16                                          | —14                                                  | 86                                  | +16                                          | —15                                                  |
| 1915.....                                        | 100                                |                                              | ( )                                                  | 100                              |                                              | +16                                                  | 100                                 |                                              | +16                                                  |
| Screw men, side rolls, universal mills, 48-inch: |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                                        | 103                                | —3                                           | —                                                    | 110                              | —9                                           | —                                                    | 111                                 | —10                                          | —                                                    |
| 1911.....                                        | 98                                 | +2                                           | —5                                                   | 104                              | —4                                           | —5                                                   | 101                                 | —1                                           | —9                                                   |
| 1912.....                                        | 98                                 | +2                                           | ( )                                                  | 95                               | +5                                           | —9                                                   | 93                                  | +8                                           | —8                                                   |
| 1913.....                                        | 102                                | —2                                           | +4                                                   | 103                              | —3                                           | +8                                                   | 105                                 | —5                                           | +13                                                  |
| 1914.....                                        | 100                                | ( )                                          | —2                                                   | 82                               | +22                                          | —20                                                  | 82                                  | +22                                          | —22                                                  |
| 1915.....                                        | 100                                |                                              | ( )                                                  | 100                              |                                              | +22                                                  | 100                                 |                                              | +22                                                  |

<sup>1</sup> No change.

TABLE 29.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATIONS—PLATE MILLS—Concluded.

| Occupation and year.                         | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|----------------------------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                                              | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in— |                                                      |
|                                              |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| Roll hands, other, universal mills, 48-inch: |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                                    | 94                                 | +6                                           |                                                      | 93                               | +8                                           |                                                      | 88                                  | +14                                          |                                                      |
| 1911.....                                    | 97                                 | +3                                           | +3                                                   | 93                               | +8                                           | (1)                                                  | 91                                  | +10                                          | +3                                                   |
| 1912.....                                    | 97                                 | +3                                           | (1)                                                  | 89                               | +12                                          | -4                                                   | 87                                  | +15                                          | -4                                                   |
| 1913.....                                    | 100                                | (1)                                          | +3                                                   | 93                               | +8                                           | +4                                                   | 93                                  | +8                                           | +7                                                   |
| 1914.....                                    | 100                                | (1)                                          | (1)                                                  | 86                               | +16                                          | -8                                                   | 86                                  | +16                                          | -8                                                   |
| 1915.....                                    | 100                                |                                              | (1)                                                  | 100                              |                                              | +16                                                  | 100                                 |                                              | +16                                                  |
| Shearmen:                                    |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                                    | 99                                 | +1                                           |                                                      | 88                               | +14                                          |                                                      | 87                                  | +15                                          |                                                      |
| 1911.....                                    | 100                                | (1)                                          | +1                                                   | 82                               | +22                                          | -7                                                   | 83                                  | +20                                          | -5                                                   |
| 1912.....                                    | 100                                | (1)                                          | (1)                                                  | 89                               | +12                                          | +9                                                   | 91                                  | +10                                          | +10                                                  |
| 1913.....                                    | 101                                | -1                                           | +1                                                   | 96                               | +4                                           | +8                                                   | 98                                  | +2                                           | +8                                                   |
| 1914.....                                    | 100                                | (1)                                          | -1                                                   | 93                               | +8                                           | -3                                                   | 94                                  | +6                                           | -4                                                   |
| 1915.....                                    | 100                                |                                              | (1)                                                  | 100                              |                                              | +8                                                   | 100                                 |                                              | +6                                                   |
| Shearmen's helpers:                          |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                                    | 100                                | (1)                                          |                                                      | 84                               | +19                                          |                                                      | 83                                  | +20                                          |                                                      |
| 1911.....                                    | 100                                | (1)                                          | (1)                                                  | 80                               | +25                                          | -5                                                   | 80                                  | +25                                          | -4                                                   |
| 1912.....                                    | 100                                | (1)                                          | (1)                                                  | 87                               | +15                                          | +9                                                   | 87                                  | +15                                          | +9                                                   |
| 1913.....                                    | 100                                | (1)                                          | (1)                                                  | 97                               | +3                                           | +11                                                  | 98                                  | +2                                           | +13                                                  |
| 1914.....                                    | 100                                | (1)                                          | (1)                                                  | 94                               | +6                                           | -3                                                   | 93                                  | +8                                           | -5                                                   |
| 1915.....                                    | 100                                |                                              | (1)                                                  | 100                              |                                              | -6                                                   | 100                                 |                                              | +8                                                   |
| Laborers:                                    |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                                    | 99                                 | +1                                           |                                                      | 89                               | +12                                          |                                                      | 88                                  | +14                                          |                                                      |
| 1911.....                                    | 99                                 | +1                                           | (1)                                                  | 88                               | +14                                          | -1                                                   | 87                                  | +15                                          | -1                                                   |
| 1912.....                                    | 102                                | -2                                           | +3                                                   | 90                               | +11                                          | +2                                                   | 91                                  | +10                                          | +5                                                   |
| 1913.....                                    | 102                                | -2                                           | (1)                                                  | 101                              | -1                                           | +12                                                  | 103                                 | -3                                           | +13                                                  |
| 1914.....                                    | 101                                | -1                                           | -1                                                   | 100                              | (1)                                          | -1                                                   | 102                                 | -2                                           | -1                                                   |
| 1915.....                                    | 100                                |                                              | -1                                                   | 100                              |                                              | (1)                                                  | 100                                 |                                              | -2                                                   |
| Unclassified—productive:                     |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1914.....                                    | 100                                | (1)                                          |                                                      | 97                               | +3                                           |                                                      | 97                                  | +3                                           |                                                      |
| 1915.....                                    | 100                                |                                              | (1)                                                  | 100                              |                                              | +3                                                   | 100                                 |                                              | +3                                                   |
| Unclassified—nonproductive:                  |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1914.....                                    | 101                                | -1                                           |                                                      | 96                               | +4                                           |                                                      | 96                                  | +4                                           |                                                      |
| 1915.....                                    | 100                                |                                              | -1                                                   | 100                              |                                              | +4                                                   | 100                                 |                                              | +4                                                   |
| All occupations:                             |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                                    | 100                                | (1)                                          |                                                      | 88                               | +14                                          |                                                      | 88                                  | +14                                          |                                                      |
| 1911.....                                    | 100                                | (1)                                          | (1)                                                  | 85                               | +18                                          | -3                                                   | 85                                  | +18                                          | -3                                                   |
| 1912.....                                    | 101                                | -1                                           | +1                                                   | 91                               | +10                                          | +7                                                   | 91                                  | +10                                          | +7                                                   |
| 1913.....                                    | 101                                | -1                                           | (1)                                                  | 99                               | +1                                           | +9                                                   | 100                                 | (1)                                          | +10                                                  |
| 1914.....                                    | 100                                | (1)                                          | -1                                                   | 95                               | +5                                           | -4                                                   | 95                                  | +5                                           | -5                                                   |
| 1915.....                                    | 100                                |                                              | (1)                                                  | 100                              |                                              | +5                                                   | 100                                 |                                              | +5                                                   |

<sup>1</sup> No change.

The relative full-time weekly earnings for the department as a whole ("All occupations") in 1910 was 88 per cent of such earnings in 1915 and in 1913, when the relative was 100. The relative was 85 in 1911, 91 in 1912, and 95 in 1914. These relative numbers for all years previous to 1914 are based on the principal productive occupations only, while those for 1914 and 1915 include the unclassified groups (see pp. 55 and 56) tabulated for 1914 and 1915 for the first time.

FULL-TIME WORKING DAYS PER WEEK.

The number and per cent of employees in the principal productive occupations in plate-mill plants whose customary working time per week was 5 days or turns, or 6 days, or 7 days, or variations thereof, are shown in Table 30.

The heading "5 days and 6 days alternately" indicates that the plants were running 6 days and 5 nights each week, being shut down for 1½ days each week, and that the employees reported under this heading worked 6 days one week and 5 nights the next. The heading "6 days and 7 days alternately" indicates that the plants were not in operation half a day in each week, the employees reported working 6 turns one week and 7 the next week. The figures are presented for each of the three districts for which reports from plate mills were obtained and for the three districts combined.

Two sets of figures are shown for the plants reported for 1914 and 1915, the first covering only the principal productive occupations as shown for all the preceding groups, and therefore strictly comparable with them, and the second including the unclassified occupations (see pp. 55 to 56) tabulated for 1914 and 1915 for the first time.

TABLE 30.—NUMBER AND PER CENT OF EMPLOYEES IN EACH DISTRICT WORKING EACH SPECIFIED NUMBER OF DAYS PER WEEK, BY YEARS, 1910 TO 1915—PLATE MILLS.

[The figures for each group of years are for identical plants.]

| District, and number of plants. | Year. | Number of employees. | Number of employees whose customary working time per week was— |                                |         |                                |                                         | Per cent of employees whose customary working time per week was— |         |                                |         |                                |                                         |
|---------------------------------|-------|----------------------|----------------------------------------------------------------|--------------------------------|---------|--------------------------------|-----------------------------------------|------------------------------------------------------------------|---------|--------------------------------|---------|--------------------------------|-----------------------------------------|
|                                 |       |                      | 5 days.                                                        | 5 days and 6 days alternately. | 6 days. | 6 days and 7 days alternately. | 6 days, 7 days, and 7 days in rotation. | 7 days.                                                          | 5 days. | 5 days and 6 days alternately. | 6 days. | 6 days and 7 days alternately. | 6 days, 7 days, and 7 days in rotation. |
| Eastern:                        |       |                      |                                                                |                                |         |                                |                                         |                                                                  |         |                                |         |                                |                                         |
| 2 plants.....                   | 1910  | 343                  |                                                                | 84                             | 253     |                                |                                         | 6                                                                |         | 25                             | 74      |                                | 2                                       |
|                                 | 1911  | 343                  |                                                                | 268                            | 75      |                                |                                         |                                                                  |         | 78                             | 22      |                                |                                         |
|                                 | 1912  | 330                  |                                                                | 245                            | 84      |                                |                                         | 1                                                                |         | 74                             | 26      |                                | (1)                                     |
| 2 plants.....                   | 1912  | 333                  |                                                                | 242                            | 86      |                                |                                         | 5                                                                |         | 73                             | 26      |                                | 2                                       |
|                                 | 1913  | 339                  |                                                                | 287                            | 45      |                                |                                         | 7                                                                |         | 85                             | 13      |                                | 2                                       |
| 2 plants.....                   | 1913  | 343                  | 1                                                              | 230                            | 105     |                                |                                         | 7                                                                | (1)     | 67                             | 31      |                                | 2                                       |
|                                 | 1914  | 310                  |                                                                | 216                            | 91      |                                |                                         | 3                                                                |         | 70                             | 29      |                                | 1                                       |
| 3 plants.....                   | 1914  | 378                  |                                                                | 295                            | 80      |                                |                                         | 3                                                                |         | 78                             | 21      |                                | 1                                       |
|                                 | 1915  | 390                  | 1                                                              | 337                            | 49      |                                |                                         | 3                                                                | (1)     | 86                             | 13      |                                | 1                                       |
| 3 plants.....                   | 1914  | 707                  |                                                                | 475                            | 2 184   |                                | 2 2                                     | 46                                                               |         | 67                             | 26      | (1)                            | 7                                       |
|                                 | 1915  | 699                  | 3                                                              | 516                            | 2 131   |                                | 2 2                                     | 47                                                               | (1)     | 74                             | 11      | (1)                            | 7                                       |

<sup>1</sup> Less than one-half of 1 per cent.

<sup>2</sup> Including 6 employees who worked 7 days every sixth week.

<sup>3</sup> Worked 6 days every fourth week.

TABLE 30.—NUMBER AND PER CENT OF EMPLOYEES IN EACH DISTRICT WORKING EACH SPECIFIED NUMBER OF DAYS PER WEEK, BY YEARS, 1910 TO 1915—*PLATE MILLS*—Concluded.

| District, and number of plants.               | Year. | Number of employees. | Number of employees whose customary working time per week was— |                                |                    |                                |                                         | Per cent of employees whose customary working time per week was— |         |                                |                 |                                |                                         |         |
|-----------------------------------------------|-------|----------------------|----------------------------------------------------------------|--------------------------------|--------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------|---------|--------------------------------|-----------------|--------------------------------|-----------------------------------------|---------|
|                                               |       |                      | 5 days,                                                        | 5 days and 6 days alternately. | 6 days.            | 6 days and 7 days alternately. | 6 days, 7 days, and 7 days in rotation. | 7 days.                                                          | 5 days. | 5 days and 6 days alternately. | 6 days.         | 6 days and 7 days alternately. | 6 days, 7 days, and 7 days in rotation. | 7 days. |
| Pittsburgh:<br>5 plants.....                  | 1910  | 709                  |                                                                |                                | 665                | 6                              |                                         | 38                                                               |         |                                | 94              | 1                              |                                         | 5       |
|                                               | 1911  | 621                  | 8                                                              | 62                             | 492                | 2                              |                                         | 57                                                               | 1       | 10                             | 79              | (1)                            |                                         | 9       |
|                                               | 1912  | 631                  |                                                                | 74                             | 477                |                                |                                         | 80                                                               |         | 12                             | 76              |                                |                                         | 13      |
| 5 plants.....                                 | 1912  | 696                  |                                                                | 78                             | 526                | 6                              |                                         | 86                                                               |         | 11                             | 76              | 1                              |                                         | 12      |
|                                               | 1913  | 668                  |                                                                | 78                             | 490                | 22                             |                                         | 78                                                               |         | 12                             | 73              | 3                              |                                         | 12      |
| 5 plants.....                                 | 1913  | 569                  |                                                                | 98                             | <sup>2</sup> 408   | 28                             |                                         | 35                                                               |         | 17                             | 72              | 5                              |                                         | 6       |
|                                               | 1914  | 514                  |                                                                | 124                            | <sup>2</sup> 324   | <sup>3</sup> 40                |                                         | 26                                                               |         | 24                             | 64              | 8                              |                                         | 5       |
| 6 plants.....                                 | 1914  | 585                  |                                                                | 124                            | <sup>3</sup> 379   | 56                             |                                         | 26                                                               |         | 21                             | 65              | 10                             |                                         | 4       |
|                                               | 1915  | 576                  |                                                                | 124                            | <sup>3</sup> 371   | 49                             |                                         | 32                                                               |         | 22                             | 64              | 9                              |                                         | 6       |
| 6 plants.....                                 | 1914  | 1,139                |                                                                | 172                            | <sup>2</sup> 817   | <sup>3</sup> 71                |                                         | 79                                                               |         | 15                             | 72              | 7                              |                                         | 7       |
|                                               | 1915  | 1,121                |                                                                | 174                            | <sup>2</sup> 807   | <sup>3</sup> 59                |                                         | 81                                                               |         | 16                             | 72              | 5                              |                                         | 7       |
| Great Lakes and Middle West:<br>4 plants..... | 1910  | 278                  |                                                                | 90                             | 172                |                                |                                         | 16                                                               |         | 32                             | 62              |                                |                                         | 6       |
|                                               | 1911  | 239                  | 22                                                             | 91                             | 121                |                                |                                         | 5                                                                | 9       | 38                             | 51              |                                |                                         | 2       |
|                                               | 1912  | 212                  | 21                                                             | 87                             | 125                | 8                              |                                         | 1                                                                | 9       | 36                             | 52              | 3                              |                                         | (1)     |
| 4 plants.....                                 | 1912  | 219                  | 19                                                             | 91                             | 97                 | 8                              |                                         | 4                                                                | 9       | 42                             | 44              | 4                              |                                         | 2       |
|                                               | 1913  | 249                  |                                                                | 95                             | 142                | 2                              | 6                                       | 4                                                                |         | 38                             | 57              | 1                              | 2                                       | 2       |
| 4 plants.....                                 | 1913  | 255                  |                                                                | 95                             | 153                | 3                              | 3                                       | 1                                                                |         | 37                             | 60              | 1                              |                                         | (1)     |
|                                               | 1914  | 222                  |                                                                | 93                             | 125                |                                | 3                                       | 1                                                                |         | 42                             | 56              |                                | 1                                       | 1       |
| 4 plants.....                                 | 1914  | 222                  |                                                                | 93                             | 125                |                                | 3                                       | 1                                                                |         | 42                             | 56              |                                | 1                                       | 1       |
|                                               | 1915  | 206                  |                                                                | 81                             | 121                |                                | 3                                       | 1                                                                |         | 39                             | 59              |                                | 1                                       | 1       |
| 4 plants.....                                 | 1914  | 455                  |                                                                | 130                            | 306                | 10                             | 3                                       | 6                                                                |         | 29                             | 67              | 2                              | 1                                       | 1       |
|                                               | 1915  | 425                  |                                                                | 106                            | 294                | 18                             | 3                                       | 4                                                                |         | 25                             | 69              | 4                              | 1                                       | 1       |
| Total:                                        |       |                      |                                                                |                                |                    |                                |                                         |                                                                  |         |                                |                 |                                |                                         |         |
| 11 plants.....                                | 1910  | 1,330                |                                                                | 174                            | 1,090              | 6                              |                                         | 60                                                               |         | 13                             | 82              | 1                              |                                         | 5       |
|                                               | 1911  | 1,203                | 30                                                             | 421                            | 688                | 2                              |                                         | 62                                                               | 3       | 35                             | 57              | (1)                            |                                         | 5       |
|                                               | 1912  | 1,203                | 21                                                             | 406                            | 686                | 8                              |                                         | 82                                                               | 2       | 34                             | 57              | 1                              |                                         | 7       |
| 11 plants.....                                | 1912  | 1,248                | 19                                                             | 411                            | 709                | 14                             |                                         | 95                                                               | 2       | 33                             | 57              | 1                              |                                         | 8       |
|                                               | 1913  | 1,256                |                                                                | 460                            | 677                | 24                             | 6                                       | 89                                                               |         | 37                             | 54              | 2                              | 1                                       | 7       |
| 11 plants.....                                | 1913  | 1,167                | 1                                                              | 423                            | <sup>2</sup> 666   | 31                             | 3                                       | 43                                                               | (1)     | 36                             | 57              | 3                              | (1)                                     | 4       |
|                                               | 1914  | 1,046                |                                                                | 433                            | <sup>2</sup> 540   | <sup>3</sup> 40                | 3                                       | 30                                                               |         | 41                             | 52              | 4                              | (1)                                     | 3       |
| 13 plants.....                                | 1914  | 1,185                |                                                                | 512                            | 584                | 56                             | 3                                       | 30                                                               |         | 43                             | 49              | 5                              | (1)                                     | 3       |
|                                               | 1915  | 1,172                | 1                                                              | 542                            | 541                | 49                             | 3                                       | 36                                                               |         | 46                             | 46              | 4                              | (1)                                     | 3       |
| 13 plants.....                                | 1914  | 2,301                |                                                                | 777                            | <sup>4</sup> 1,307 | <sup>3</sup> 81                | <sup>5</sup> 5                          | 131                                                              |         | 34                             | <sup>2</sup> 57 | 3                              | (1)                                     | 6       |
|                                               | 1915  | 2,245                | 3                                                              | 796                            | <sup>4</sup> 1,232 | <sup>3</sup> 77                | <sup>5</sup> 5                          | 132                                                              | (1)     | 35                             | <sup>2</sup> 55 | 3                              | (1)                                     | 6       |

<sup>1</sup> Less than one-half of 1 per cent.<sup>2</sup> Including 6 employees who worked 7 days every sixth week.<sup>3</sup> Including 4 employees who worked 7 days every fourth week.<sup>4</sup> Including 12 employees who worked 7 days every sixth week.<sup>5</sup> Including 2 employees who worked 6 days every fourth week.

Two general tables are presented for this department, as follows:

Table K.—Full-time hours per week, rates of wages per hour, and full-time weekly earnings, in the United States, by years, 1910 to 1915.

Table L.—Full-time hours per week, rates of wages per hour, and full-time weekly earnings, in each district, by years, 1913 to 1915.

The data from Table K are summarized in Table 28, percentages being used instead of the actual figures for classified hours and rates of wages.

The order in which the occupations are given in Tables K and L and the table of relative numbers follows that of the processes of manufacture. "Identical plants," as used in the tables of this report, are identical units of identical establishments reporting the same occupations in each of two or more consecutive years. For a more extended explanation see page 58.

Figures for each geographical division for each preceding year, back to 1910, corresponding to those given in Table L for 1913, 1914, and 1915, were given in Bulletins 151 and 168 of this bureau.

Descriptions of the specified occupations which appear in the tables of this chapter and of other occupations of the plate-mill department included in the two groups designated as "Unclassified—productive," and "Unclassified—nonproductive," are to be found in the Glossary of Occupations, pages 494 to 497.

TABLE K.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1910 TO 1915—

[The figures for each group of

| Line No. | Occupation, and number of plants.                | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |
|----------|--------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|
|          |                                                  |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 |
|          | Charging-crane and charging - machine operators: |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 1        | 9 plants.....                                    | 1910  | 41                   | 71.6                              | \$0.303                         | \$21.85                            |                                                |                      |                 |    | 14                   | 23 | 4                    |
| 2        |                                                  | 1911  | 39                   | 69.4                              | .283                            | 19.70                              |                                                |                      | 1               | 2  | 13                   | 22 | 1                    |
| 3        |                                                  | 1912  | 38                   | 69.1                              | .315                            | 21.85                              |                                                |                      | 1               | 2  | 13                   | 22 |                      |
| 4        | 10 plants.....                                   | 1912  | 42                   | 69.6                              | .315                            | 21.98                              |                                                |                      |                 | 2  | 14                   | 14 | 12                   |
| 5        |                                                  | 1913  | 44                   | 70.3                              | .343                            | 24.24                              |                                                |                      |                 |    | 14                   | 18 | 12                   |
| 6        | 10 plants.....                                   | 1913  | 46                   | 70.7                              | .339                            | 24.07                              |                                                |                      |                 |    | 16                   | 18 | 12                   |
| 7        |                                                  | 1914  | 42                   | 70.3                              | .303                            | 21.47                              |                                                |                      |                 |    | 16                   | 16 | 10                   |
| 8        | 12 plants.....                                   | 1914  | 52                   | 70.2                              | .306                            | 21.69                              |                                                |                      |                 |    | 22                   | 16 | 14                   |
| 9        |                                                  | 1915  | 54                   | 70.3                              | .329                            | 23.39                              |                                                |                      |                 |    | 22                   | 16 | 16                   |
| 10       | Heaters:                                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 11       | 11 plants.....                                   | 1910  | 56                   | 71.0                              | .508                            | 36.35                              |                                                |                      |                 |    | 22                   | 30 | 4                    |
| 12       |                                                  | 1911  | 55                   | 69.1                              | .468                            | 32.46                              |                                                |                      | 1               | 2  | 21                   | 30 | 1                    |
|          |                                                  | 1912  | 53                   | 69.4                              | .513                            | 35.78                              |                                                |                      | 1               | 2  | 19                   | 28 | 3                    |
| 13       | 11 plants.....                                   | 1912  | 55                   | 69.9                              | .513                            | 36.02                              |                                                |                      |                 | 2  | 20                   | 18 | 15                   |
| 14       |                                                  | 1913  | 54                   | 71.0                              | .557                            | 39.93                              |                                                |                      |                 |    | 20                   | 19 | 15                   |
| 15       | 11 plants.....                                   | 1913  | 54                   | 71.7                              | .562                            | 40.59                              |                                                |                      |                 |    | 21                   | 14 | 19                   |
| 16       |                                                  | 1914  | 52                   | 71.8                              | .520                            | 37.73                              |                                                |                      |                 |    | 21                   | 15 | 12                   |
| 17       | 13 plants.....                                   | 1914  | 64                   | 70.5                              | .529                            | 37.63                              |                                                |                      |                 |    | 31                   | 15 | 14                   |
| 18       |                                                  | 1915  | 61                   | 70.6                              | .557                            | 39.73                              |                                                |                      |                 |    | 30                   | 13 | 14                   |
| 19       | Heaters' helpers:                                |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 20       | 10 plants.....                                   | 1910  | 111                  | 69.5                              | .243                            | 16.98                              |                                                |                      |                 |    | 74                   | 31 | 6                    |
| 21       |                                                  | 1911  | 108                  | 67.3                              | .227                            | 15.31                              |                                                |                      |                 | 4  | 71                   | 32 | 1                    |
|          |                                                  | 1912  | 101                  | 67.5                              | .247                            | 16.71                              |                                                |                      |                 | 3  | 65                   | 30 | 3                    |
| 22       | 10 plants.....                                   | 1912  | 113                  | 68.7                              | .243                            | 16.74                              |                                                |                      |                 | 3  | 69                   | 28 | 9                    |
| 23       |                                                  | 1913  | 107                  | 68.7                              | .252                            | 17.50                              |                                                |                      |                 |    | 69                   | 25 | 13                   |
| 24       | 10 plants.....                                   | 1913  | 105                  | 68.5                              | .252                            | 17.42                              |                                                |                      |                 |    | 76                   | 12 | 17                   |
| 25       |                                                  | 1914  | 103                  | 68.2                              | .239                            | 16.23                              |                                                |                      |                 |    | 78                   | 8  | 17                   |
| 26       | 12 plants.....                                   | 1914  | 112                  | 67.7                              | .247                            | 16.68                              |                                                |                      |                 |    | 85                   | 10 | 17                   |
| 27       |                                                  | 1915  | 109                  | 67.6                              | .264                            | 18.04                              |                                                |                      |                 |    | 83                   | 9  | 17                   |
| 28       | Roll engineers:                                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 29       | 11 plants.....                                   | 1910  | 36                   | 71.5                              | .300                            | 21.45                              |                                                |                      |                 |    | 10                   | 22 | 4                    |
| 30       |                                                  | 1911  | 35                   | 70.8                              | .290                            | 20.55                              |                                                |                      |                 | 2  | 12                   | 13 | 6                    |
|          |                                                  | 1912  | 35                   | 71.5                              | .289                            | 20.78                              |                                                |                      |                 | 2  | 12                   | 12 | 6                    |
| 31       | 11 plants.....                                   | 1912  | 37                   | 72.5                              | .287                            | 20.93                              |                                                |                      |                 | 2  | 12                   | 10 | 8                    |
| 32       |                                                  | 1913  | 36                   | 72.8                              | .309                            | 22.63                              |                                                |                      |                 |    | 12                   | 11 | 8                    |
| 33       | 11 plants.....                                   | 1913  | 34                   | 72.4                              | .308                            | 22.45                              |                                                |                      |                 |    | 13                   | 10 | 6                    |
| 34       |                                                  | 1914  | 32                   | 70.5                              | .305                            | 21.53                              |                                                |                      |                 |    | 13                   | 13 | 4                    |
| 35       | 13 plants.....                                   | 1914  | 38                   | 70.2                              | .307                            | 21.55                              |                                                |                      |                 |    | 17                   | 13 | 6                    |
| 36       |                                                  | 1915  | 39                   | 69.7                              | .309                            | 21.58                              |                                                |                      |                 |    | 20                   | 11 | 6                    |
| 37       | Rollers, sheared-plate mills:                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 38       | 9 plants.....                                    | 1910  | 28                   | 68.4                              | .712                            | 48.18                              |                                                |                      |                 |    | 20                   | 8  |                      |
| 39       |                                                  | 1911  | 28                   | 68.1                              | .607                            | 41.46                              |                                                |                      | 1               |    | 15                   | 12 |                      |
|          |                                                  | 1912  | 25                   | 68.5                              | .729                            | 50.03                              |                                                |                      | 1               |    | 12                   | 12 |                      |
| 40       | 9 plants.....                                    | 1912  | 27                   | 68.7                              | .711                            | 48.93                              |                                                |                      |                 |    | 13                   | 14 |                      |
| 41       |                                                  | 1913  | 26                   | 68.5                              | .718                            | 49.21                              |                                                |                      |                 |    | 13                   | 13 |                      |
| 42       | 9 plants.....                                    | 1913  | 25                   | 68.5                              | .755                            | 51.55                              |                                                |                      |                 |    | 13                   | 12 |                      |
| 43       |                                                  | 1914  | 24                   | 68.1                              | .691                            | 47.32                              |                                                |                      |                 |    | 14                   | 10 |                      |
| 44       | 11 plants.....                                   | 1914  | 28                   | 68.0                              | .703                            | 47.94                              |                                                |                      |                 |    | 16                   | 12 |                      |
| 45       |                                                  | 1915  | 28                   | 67.9                              | .734                            | 49.89                              |                                                |                      |                 |    | 16                   | 12 |                      |



AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
PLATE MILLS.

years are for identical plants.]

| Employees whose rates of wages per hour were— |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | Line<br>No. |
|-----------------------------------------------|----------------------------------|-----------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|-----------------------------|-------------|
| 7<br>and<br>under<br>8<br>cents.              | 8<br>and<br>under<br>9<br>cents. | 9<br>and<br>under<br>10<br>cents. | 10<br>and<br>under<br>12<br>cents. | 12<br>and<br>under<br>14<br>cents. | 14<br>and<br>under<br>16<br>cents. | 16<br>and<br>under<br>18<br>cents. | 18<br>and<br>under<br>20<br>cents. | 20<br>and<br>under<br>25<br>cents. | 25<br>and<br>under<br>30<br>cents. | 30<br>and<br>under<br>40<br>cents. | 40<br>and<br>under<br>50<br>cents. | 50<br>and<br>under<br>60<br>cents. | 60<br>and<br>under<br>70<br>cents. | 70<br>cents<br>and<br>over. |             |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 1           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 11                                 | 16                                 | 8                                  | 6                                  |                                    |                                    |                             | 2           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 5                                  | 10                                 | 7                                  | 15                                 | 1                                  | 1                                  |                                    |                             | 3           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 4                                  | 7                                  | 7                                  | 14                                 | 4                                  | 1                                  | 1                                  |                             | 4           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 4                                  | 7                                  | 8                                  | 18                                 | 4                                  | 1                                  | 1                                  |                             | 5           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 4                                  | 6                                  | 7                                  | 12                                 | 12                                 | 1                                  | 1                                  |                             | 6           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 2                                  | 10                                 | 8                                  | 12                                 | 12                                 | 1                                  | 1                                  |                             | 7           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 1                                  | 9                                  | 9                                  | 14                                 | 7                                  |                                    |                                    |                             | 8           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 2                                  | 3                                  | 11                                 | 9                                  | 9                                  |                                    |                                    |                             | 9           |
|                                               |                                  |                                   |                                    |                                    | 2                                  | 2                                  | 3                                  | 11                                 | 5                                  | 15                                 | 14                                 | 11                                 | 2                                  | 1                           | 10          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 8                                  | 12                                 | 20                                 | 8                                  | 4                           | 11          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 3                                  | 15                                 | 11                                 | 21                                 | 4                                  | 1                           | 12          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 3                                  | 9                                  | 6                                  | 24                                 | 9                                  | 2                           | 13          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 3                                  | 9                                  | 7                                  | 25                                 | 9                                  | 2                           | 14          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 6                                  | 17                                 | 11                                 | 8                                  | 12                          | 15          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 6                                  | 13                                 | 15                                 | 8                                  | 12                          | 16          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 11                                 | 7                                  | 19                                 | 11                                 | 2                           | 17          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 10                                 | 11                                 | 27                                 | 13                                 | 2                           | 18          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 10                                 | 10                                 | 9                                  | 13                                 | 12                                 | 15                          | 19          |
|                                               |                                  |                                   |                                    |                                    | 10                                 | 19                                 | 14                                 | 22                                 | 28                                 | 6                                  | 12                                 |                                    |                                    |                             | 20          |
|                                               |                                  |                                   |                                    |                                    | 11                                 | 17                                 | 16                                 | 33                                 | 19                                 | 5                                  | 7                                  |                                    |                                    |                             | 21          |
|                                               |                                  |                                   |                                    |                                    |                                    | 14                                 | 16                                 | 38                                 | 19                                 | 7                                  | 7                                  |                                    |                                    |                             | 22          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 23          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 24          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 25          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 26          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 27          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 28          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 29          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 30          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 31          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 32          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 33          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 34          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 35          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 36          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 37          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 38          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 39          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 40          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 41          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 42          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 43          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 44          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 45          |

TABLE K.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1910 TO 1915—

| Line No. | Occupation, and number of plants.       | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |
|----------|-----------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|
|          |                                         |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 |
| 1        | Screw men, sheared-plate mills:         | 1910  | 28                   | 68.6                              | \$0.421                         | \$28.75                            |                                                |                      |                 |    | 18                   | 10 |                      |
| 2        | 9 plants.....                           | 1911  | 28                   | 68.6                              | .393                            | 20.95                              |                                                |                      | 1               |    | 13                   | 14 |                      |
| 3        |                                         | 1912  | 27                   | 68.8                              | .446                            | 30.67                              |                                                |                      | 1               |    | 12                   | 14 |                      |
| 4        | 9 plants.....                           | 1912  | 29                   | 69.0                              | .435                            | 30.00                              |                                                |                      | 1               |    | 12                   | 16 |                      |
| 5        |                                         | 1913  | 29                   | 69.0                              | .482                            | 33.36                              |                                                |                      |                 |    | 13                   | 16 |                      |
| 6        | 9 plants.....                           | 1913  | 27                   | 68.9                              | .488                            | 33.78                              |                                                |                      |                 |    | 13                   | 14 |                      |
| 7        |                                         | 1914  | 27                   | 68.5                              | .426                            | 29.46                              |                                                |                      |                 |    | 15                   | 12 |                      |
| 8        | 10 plants.....                          | 1914  | 28                   | 68.7                              | .434                            | 30.08                              |                                                |                      |                 |    | 14                   | 14 |                      |
| 9        |                                         | 1915  | 26                   | 68.3                              | .474                            | 32.61                              |                                                |                      |                 |    | 14                   | 12 |                      |
| 10       | Table operators, sheared-plate mills:   | 1910  | 26                   | 68.4                              | .318                            | 21.64                              |                                                |                      |                 |    | 18                   | 8  |                      |
| 11       | 9 plants.....                           | 1911  | 28                   | 68.1                              | .300                            | 20.44                              |                                                |                      |                 |    | 16                   | 12 |                      |
| 12       |                                         | 1912  | 28                   | 68.1                              | .341                            | 23.24                              |                                                |                      |                 |    | 16                   | 12 |                      |
| 13       | 9 plants.....                           | 1912  | 30                   | 68.3                              | .334                            | 22.85                              |                                                |                      |                 |    | 16                   | 14 |                      |
| 14       |                                         | 1913  | 31                   | 68.4                              | .361                            | 24.74                              |                                                |                      |                 |    | 16                   | 15 |                      |
| 15       | 9 plants.....                           | 1913  | 31                   | 68.2                              | .363                            | 24.87                              |                                                |                      |                 |    | 17                   | 14 |                      |
| 16       |                                         | 1914  | 27                   | 67.7                              | .324                            | 22.18                              |                                                |                      |                 |    | 17                   | 10 |                      |
| 17       | 11 plants.....                          | 1914  | 31                   | 67.6                              | .317                            | 21.73                              |                                                |                      |                 |    | 19                   | 12 |                      |
| 18       |                                         | 1915  | 32                   | 67.5                              | .332                            | 22.63                              |                                                |                      |                 |    | 20                   | 12 |                      |
| 19       | Hook men:                               | 1910  | 73                   | 68.3                              | .262                            | 17.88                              |                                                |                      |                 |    | 50                   | 23 |                      |
| 20       | 9 plants.....                           | 1911  | 72                   | 68.1                              | .246                            | 16.81                              |                                                |                      |                 |    | 42                   | 30 |                      |
| 21       |                                         | 1912  | 69                   | 68.3                              | .279                            | 19.07                              |                                                |                      |                 |    | 39                   | 30 |                      |
| 22       | 9 plants.....                           | 1912  | 72                   | 68.5                              | .276                            | 18.90                              |                                                |                      |                 |    | 38                   | 34 |                      |
| 23       |                                         | 1913  | 75                   | 68.6                              | .310                            | 21.35                              |                                                |                      |                 |    | 38                   | 37 |                      |
| 24       | 9 plants.....                           | 1913  | 76                   | 68.4                              | .313                            | 21.55                              |                                                |                      |                 |    | 43                   | 33 |                      |
| 25       |                                         | 1914  | 65                   | 67.9                              | .277                            | 18.95                              |                                                |                      |                 |    | 43                   | 22 |                      |
| 26       | 11 plants.....                          | 1914  | 74                   | 68.2                              | .294                            | 20.27                              |                                                |                      |                 |    | 42                   | 32 |                      |
| 27       |                                         | 1915  | 76                   | 68.0                              | .314                            | 21.57                              |                                                |                      |                 |    | 44                   | 32 |                      |
| 28       | Roll hands, other, sheared-plate mills: | 1910  | 14                   | 68.0                              | .263                            | 17.71                              |                                                |                      |                 |    | 10                   | 4  |                      |
| 29       | 6 plants.....                           | 1911  | 14                   | 68.9                              | .242                            | 16.64                              |                                                |                      |                 |    | 6                    | 8  |                      |
| 30       |                                         | 1912  | 14                   | 68.9                              | .279                            | 19.16                              |                                                |                      |                 |    | 6                    | 8  |                      |
| 31       | 6 plants.....                           | 1912  | 16                   | 69.3                              | .269                            | 18.54                              |                                                |                      |                 |    | 6                    | 10 |                      |
| 32       |                                         | 1913  | 16                   | 69.3                              | .280                            | 19.31                              |                                                |                      |                 |    | 6                    | 10 |                      |
| 33       | 7 plants.....                           | 1913  | 20                   | 69.1                              | .265                            | 18.28                              |                                                |                      |                 |    | 10                   | 10 |                      |
| 34       |                                         | 1914  | 18                   | 68.7                              | .246                            | 17.08                              |                                                |                      |                 |    | 10                   | 8  |                      |
| 35       | 9 plants.....                           | 1914  | 24                   | 67.4                              | .257                            | 17.42                              |                                                |                      |                 |    | 16                   | 8  |                      |
| 36       |                                         | 1915  | 24                   | 67.4                              | .268                            | 18.12                              |                                                |                      |                 |    | 14                   | 10 |                      |
| 37       | Rollers, universal mills, 48-inch:      | 1910  | 8                    | 69.5                              | .636                            | 44.22                              |                                                |                      |                 |    | 4                    | 4  |                      |
| 38       | 4 plants.....                           | 1911  | 7                    | 68.4                              | .584                            | 40.31                              |                                                |                      |                 | 1  | 2                    | 4  |                      |
| 39       |                                         | 1912  | 6                    | 67.8                              | .581                            | 39.78                              |                                                |                      |                 | 1  | 2                    | 3  |                      |
| 40       |                                         | 1913  | 6                    | 69.8                              | .672                            | 47.81                              |                                                |                      |                 |    | 2                    | 4  |                      |
| 41       | 4 plants.....                           | 1913  | 6                    | 69.8                              | .672                            | 47.81                              |                                                |                      |                 |    | 2                    | 4  |                      |
| 42       |                                         | 1914  | 6                    | 69.8                              | .575                            | 40.78                              |                                                |                      |                 |    | 2                    | 4  |                      |
| 43       | 5 plants.....                           | 1914  | 8                    | 68.8                              | .590                            | 41.08                              |                                                |                      |                 |    | 4                    | 4  |                      |
| 44       |                                         | 1915  | 8                    | 68.8                              | .676                            | 47.10                              |                                                |                      |                 |    | 4                    | 4  |                      |

AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
PLATE MILLS—Continued.

| Employees whose rates of wages per hour were— |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | Line<br>No. |
|-----------------------------------------------|----------------------------------|-----------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|-----------------------------|-------------|
| 7<br>and<br>under<br>8<br>cents.              | 8<br>and<br>under<br>9<br>cents. | 9<br>and<br>under<br>10<br>cents. | 10<br>and<br>under<br>12<br>cents. | 12<br>and<br>under<br>14<br>cents. | 14<br>and<br>under<br>16<br>cents. | 16<br>and<br>under<br>18<br>cents. | 18<br>and<br>under<br>20<br>cents. | 20<br>and<br>under<br>25<br>cents. | 25<br>and<br>under<br>30<br>cents. | 30<br>and<br>under<br>40<br>cents. | 40<br>and<br>under<br>50<br>cents. | 50<br>and<br>under<br>60<br>cents. | 60<br>and<br>under<br>70<br>cents. | 70<br>cents<br>and<br>over. |             |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 1                                  | 4                                  | 10                                 | 6                                  | 4                                  | 4                                  |                             | 1           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 1                                  | 6                                  | 10                                 | 4                                  | 5                                  | 2                                  |                             | 2           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 9                                  | 3                                  | 4                                  | 5                                  | 1                           | 3           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 1                                  | 6                                  | 9                                  | 3                                  | 4                                  | 5                                  | 1                           | 4           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 13                                 | 2                                  |                                    | 8                                  | 4                           | 5           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 11                                 | 2                                  |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  | 5                                  | 7                                  | 6                                  | 1                                  | 8                                  | 4                           | 6           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 4                           | 7           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  | 4                                  | 7                                  | 8                                  | 1                                  |                                    |                             |             |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  | 2                                  | 6                                  | 5                                  | 3                                  | 7                                  | 4                           | 8           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 1                           | 9           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 8                                  | 6                                  | 4                                  | 8                                  |                                    |                                    |                             | 10          |
|                                               |                                  |                                   |                                    |                                    |                                    | 1                                  | 2                                  | 9                                  | 7                                  | 5                                  |                                    |                                    |                                    |                             | 11          |
|                                               |                                  |                                   |                                    |                                    |                                    | 1                                  | 3                                  | 4                                  | 8                                  | 2                                  | 8                                  | 2                                  |                                    |                             | 12          |
|                                               |                                  |                                   |                                    |                                    |                                    | 2                                  |                                    | 6                                  | 5                                  | 1                                  | 11                                 | 4                                  |                                    |                             | 13          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 8                                  | 8                                  |                                    |                                    |                                    |                                    |                             | 14          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 1                                  | 9                                  | 5                                  | 1                                  | 11                                 | 4                                  |                                    |                             | 15          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 8                                  | 6                                  | 7                                  | 3                                  | 3                                  |                                    |                             | 16          |
|                                               |                                  |                                   |                                    |                                    |                                    | 2                                  |                                    | 8                                  | 6                                  | 9                                  | 3                                  | 3                                  |                                    |                             | 17          |
|                                               |                                  |                                   |                                    |                                    | 4                                  |                                    | 2                                  | 3                                  | 3                                  | 10                                 | 7                                  | 3                                  |                                    |                             | 18          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    | 2                                  | 4                                  |                                    | 18                                 | 19                                 | 8                                  | 20                                 | 2                                  |                                    |                                    |                             | 19          |
|                                               |                                  |                                   |                                    |                                    | 3                                  |                                    | 12                                 | 12                                 | 9                                  | 12                                 | 6                                  |                                    |                                    |                             | 20          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 8                                  | 13                                 | 3                                  | 12                                 | 10                                 |                                    | 2                                  |                             | 21          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    |                                    |                                    | 7                                  | 13                                 | 25                                 | 3                                  | 12                                 | 10                                 | 2                                  |                                    |                             | 22          |
|                                               |                                  |                                   |                                    |                                    |                                    | 10                                 | 2                                  | 20                                 | 9                                  | 16                                 | 16                                 | 2                                  |                                    |                             | 23          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    |                                    |                                    | 4                                  | 4                                  | 22                                 | 12                                 | 16                                 | 16                                 | 2                                  |                                    |                             | 24          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 6                                  | 19                                 | 20                                 | 8                                  |                                    |                                    |                                    |                             | 25          |
|                                               |                                  |                                   |                                    |                                    |                                    | 4                                  |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 3                                  | 20                                 | 20                                 | 19                                 | 8                                  |                                    |                                    |                             | 26          |
|                                               |                                  |                                   |                                    |                                    | 4                                  |                                    | 5                                  | 11                                 | 21                                 | 15                                 | 14                                 | 5                                  |                                    |                             | 27          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    |                                    |                                    | 4                                  | 2                                  |                                    | 2                                  | 6                                  |                                    |                                    |                                    |                             | 28          |
|                                               |                                  |                                   |                                    |                                    |                                    | 2                                  |                                    | 5                                  | 3                                  |                                    | 2                                  |                                    |                                    |                             | 29          |
|                                               |                                  |                                   |                                    |                                    |                                    | 2                                  | 2                                  | 2                                  | 3                                  | 3                                  | 2                                  |                                    |                                    |                             | 30          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    |                                    |                                    | 2                                  |                                    | 3                                  | 3                                  | 3                                  | 2                                  |                                    |                                    |                             | 31          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 2                                  | 4                                  | 1                                  | 5                                  | 2                                  |                                    |                                    |                             | 32          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    |                                    |                                    | 3                                  | 3                                  | 6                                  | 1                                  | 5                                  | 2                                  |                                    |                                    |                             | 33          |
|                                               |                                  |                                   |                                    |                                    | 2                                  | 1                                  | 3                                  | 3                                  | 4                                  | 5                                  |                                    |                                    |                                    |                             | 34          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    |                                    | 2                                  |                                    | 3                                  | 8                                  | 4                                  | 6                                  | 1                                  |                                    |                                    |                             | 35          |
|                                               |                                  |                                   |                                    |                                    | 2                                  |                                    | 5                                  | 1                                  | 2                                  | 4                                  | 8                                  | 2                                  |                                    |                             | 36          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                                    |                             | 37          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    | 2                                  | 4                           | 37          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 3                                  | 2                           | 38          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                                    | 1                                  | 3                           | 39          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                                    | 2                                  | 2                           | 40          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                                    | 2                                  | 2                           | 41          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                                    | 2                                  | 2                           | 42          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                                    | 4                                  | 2                           | 43          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    | 3                                  | 3                           | 44          |

TABLE K.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1910 TO 1915—

| Line No. | Occupation, and number of plants.                | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |     |                      |
|----------|--------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|-----|----------------------|
|          |                                                  |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72  | Over 72 and under 84 |
| 1        | Screw men, main rolls, universal mills, 48-inch: | 1910  | 8                    | 69.5                              | \$0.470                         | \$32.75                            |                                                |                      |                 |    | 4                    | 4   |                      |
| 2        | 4 plants.....                                    | 1911  | 7                    | 66.6                              | .421                            | 28.23                              |                                                |                      |                 | 2  | 2                    | 3   |                      |
| 3        |                                                  | 1912  | 7                    | 66.6                              | .407                            | 27.38                              |                                                |                      |                 | 2  | 2                    | 3   |                      |
| 4        |                                                  | 1913  | 7                    | 70.1                              | .460                            | 32.66                              |                                                |                      |                 |    | 2                    | 5   |                      |
| 5        | 4 plants.....                                    | 1913  | 7                    | 70.1                              | .460                            | 32.66                              |                                                |                      |                 |    | 2                    | 5   |                      |
| 6        |                                                  | 1914  | 7                    | 70.1                              | .392                            | 27.76                              |                                                |                      |                 |    | 2                    | 5   |                      |
| 7        | 5 plants.....                                    | 1914  | 9                    | 69.2                              | .386                            | 26.96                              |                                                |                      |                 |    | 4                    | 5   |                      |
| 8        |                                                  | 1915  | 9                    | 69.2                              | .451                            | 31.51                              |                                                |                      |                 |    | 4                    | 5   |                      |
| 9        | Screw men, side rolls, universal mills, 48-inch: | 1910  | 10                   | 69.2                              | .314                            | 21.77                              |                                                |                      |                 |    | 6                    | 4   |                      |
| 10       | 4 plants.....                                    | 1911  | 9                    | 66.3                              | .296                            | 19.80                              |                                                |                      |                 | 2  | 4                    | 3   |                      |
| 11       |                                                  | 1912  | 9                    | 66.3                              | .271                            | 18.12                              |                                                |                      |                 | 2  | 4                    | 3   |                      |
| 12       |                                                  | 1913  | 8                    | 68.6                              | .294                            | 20.56                              |                                                |                      |                 |    | 4                    | 4   |                      |
| 13       | 4 plants.....                                    | 1913  | 6                    | 69.8                              | .332                            | 23.47                              |                                                |                      |                 |    | 2                    | 4   |                      |
| 14       |                                                  | 1914  | 8                    | 68.6                              | .262                            | 18.27                              |                                                |                      |                 |    | 4                    | 4   |                      |
| 15       | 5 plants.....                                    | 1914  | 10                   | 68.1                              | .271                            | 18.69                              |                                                |                      |                 |    | 6                    | 4   |                      |
| 16       |                                                  | 1915  | 10                   | 68.1                              | .332                            | 22.83                              |                                                |                      |                 |    | 6                    | 4   |                      |
| 17       | Roll bands, other, universal mills, 48-inch:     | 1910  | 6                    | 70.0                              | .299                            | 20.93                              |                                                |                      |                 |    | 2                    | 4   |                      |
| 18       | 2 plants.....                                    | 1911  | 4                    | 72.0                              | .299                            | 21.55                              |                                                |                      |                 |    |                      | 4   |                      |
| 19       |                                                  | 1912  | 4                    | 72.0                              | .288                            | 20.74                              |                                                |                      |                 |    |                      | 4   |                      |
| 20       | 3 plants.....                                    | 1912  | 5                    | 69.6                              | .277                            | 19.41                              |                                                |                      |                 | 1  |                      | 4   |                      |
| 21       |                                                  | 1913  | 6                    | 72.0                              | .238                            | 20.74                              |                                                |                      |                 |    |                      | 6   |                      |
| 22       | 4 plants.....                                    | 1913  | 8                    | 70.3                              | .261                            | 18.50                              |                                                |                      |                 |    | 2                    | 6   |                      |
| 23       |                                                  | 1914  | 8                    | 70.3                              | .241                            | 17.06                              |                                                |                      |                 |    | 2                    | 6   |                      |
| 24       | 5 plants.....                                    | 1914  | 10                   | 69.5                              | .266                            | 18.48                              |                                                |                      |                 |    | 4                    | 6   |                      |
| 25       |                                                  | 1915  | 9                    | 69.2                              | .310                            | 21.46                              |                                                |                      |                 |    | 4                    | 5   |                      |
| 26       | Shearmen:                                        | 1910  | 70                   | 67.5                              | .378                            | 25.69                              |                                                |                      |                 | 2  | 45                   | 23  |                      |
| 27       | 11 plants.....                                   | 1911  | 66                   | 68.0                              | .356                            | 24.45                              |                                                |                      |                 | 4  | 28                   | 34  |                      |
| 28       |                                                  | 1912  | 65                   | 68.2                              | .386                            | 26.61                              |                                                |                      |                 | 4  | 27                   | 37  |                      |
| 29       | 11 plants.....                                   | 1912  | 69                   | 68.3                              | .384                            | 26.48                              |                                                |                      |                 | 5  | 26                   | 33  |                      |
| 30       |                                                  | 1913  | 69                   | 68.8                              | .413                            | 28.63                              |                                                | 1                    | 1               | 26 | 41                   |     |                      |
| 31       | 11 plants.....                                   | 1913  | 69                   | 68.8                              | .415                            | 28.81                              |                                                |                      | 1               |    | 27                   | 41  |                      |
| 32       |                                                  | 1914  | 64                   | 68.4                              | .402                            | 27.74                              |                                                |                      | 1               |    | 29                   | 34  |                      |
| 33       | 13 plants.....                                   | 1914  | 73                   | 68.4                              | .406                            | 27.97                              |                                                |                      | 1               |    | 33                   | 39  |                      |
| 34       |                                                  | 1915  | 73                   | 63.2                              | .436                            | 29.68                              |                                                |                      | 1               | 2  | 32                   | 38  |                      |
| 35       | Shearmen's helpers:                              | 1910  | 460                  | 68.4                              | .215                            | 14.71                              |                                                |                      |                 | 7  | 261                  | 192 |                      |
| 36       | 11 plants.....                                   | 1911  | 429                  | 68.4                              | .206                            | 14.20                              |                                                |                      |                 | 16 | 174                  | 239 |                      |
| 37       |                                                  | 1912  | 432                  | 68.6                              | .223                            | 15.42                              |                                                |                      |                 | 11 | 170                  | 251 |                      |
| 38       | 11 plants.....                                   | 1912  | 392                  | 68.3                              | .226                            | 15.59                              |                                                |                      |                 | 9  | 166                  | 217 |                      |
| 39       |                                                  | 1913  | 393                  | 68.4                              | .253                            | 17.47                              |                                                |                      | 2               | 4  | 167                  | 220 |                      |
| 40       | 11 plants.....                                   | 1913  | 425                  | 68.7                              | .250                            | 17.25                              |                                                |                      | 2               |    | 180                  | 243 |                      |
| 41       |                                                  | 1914  | 373                  | 68.2                              | .240                            | 16.53                              |                                                |                      | 2               |    | 180                  | 191 |                      |
| 42       | 13 parts.....                                    | 1914  | 408                  | 68.2                              | .243                            | 16.71                              |                                                |                      | 2               |    | 195                  | 211 |                      |
| 43       |                                                  | 1915  | 406                  | 68.4                              | .260                            | 17.89                              |                                                |                      | 2               | 6  | 185                  | 203 | 10                   |

AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
PLATE MILLS—Continued.

| Employees whose rates of wages per hour were— |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | Line<br>No. |
|-----------------------------------------------|----------------------------------|-----------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|-----------------------------|-------------|
| 7<br>and<br>under<br>8<br>cents.              | 8<br>and<br>under<br>9<br>cents. | 9<br>and<br>under<br>10<br>cents. | 10<br>and<br>under<br>12<br>cents. | 12<br>and<br>under<br>14<br>cents. | 14<br>and<br>under<br>16<br>cents. | 16<br>and<br>under<br>18<br>cents. | 18<br>and<br>under<br>20<br>cents. | 20<br>and<br>under<br>25<br>cents. | 25<br>and<br>under<br>30<br>cents. | 30<br>and<br>under<br>40<br>cents. | 40<br>and<br>under<br>50<br>cents. | 50<br>and<br>under<br>60<br>cents. | 60<br>and<br>under<br>70<br>cents. | 70<br>cents<br>and<br>over. |             |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 2                                  | 2                                  | 2                                  | 2                                  |                             | 1           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  | 1                                  | 4                                  | 4                                  | 1                                  |                                    |                             | 2           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    | 3                                  | 3                                  | 1                                  |                                    |                             | 3           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                                    |                                    | 1                                  | 1                           | 4           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    | 3                                  | 3                                  |                                    | 1                                  |                             | 5           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    | 2                                  | 2                                  | 2                                  |                                    |                             | 6           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    | 2                                  | 2                                  | 2                                  |                                    |                             | 7           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  | 2                                  | 3                                  | 3                                  |                                    | 2                                  |                             | 8           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 4                                  |                                    | 4                                  | 2                                  |                                    |                                    |                             | 9           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 4                                  |                                    | 4                                  | 1                                  |                                    |                                    |                             | 10          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 4                                  |                                    |                                    | 5                                  |                                    |                                    |                                    |                             | 11          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 4                                  |                                    |                                    | 2                                  | 1                                  | 1                                  |                                    |                             | 12          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    | 2                                  | 1                                  | 1                                  |                                    |                             | 13          |
|                                               |                                  |                                   |                                    |                                    |                                    | 2                                  | 2                                  |                                    |                                    | 4                                  |                                    |                                    |                                    |                             | 14          |
|                                               |                                  |                                   |                                    |                                    |                                    | 2                                  | 2                                  |                                    |                                    | 6                                  |                                    |                                    |                                    |                             | 15          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  | 2                                  | 4                                  | 2                                  |                                    |                                    |                             | 16          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 4                                  |                                    |                                    |                                    |                             | 17          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 2                                  |                                    |                                    |                                    |                             | 18          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 2                                  |                                    |                                    |                                    |                             | 19          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 1                                  | 2                                  | 2                                  |                                    |                                    |                                    |                             | 20          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 3                                  | 1                                  | 2                                  |                                    |                                    |                                    |                             | 21          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 2                                  | 3                                  | 1                                  | 2                                  |                                    |                                    |                                    |                             | 22          |
|                                               |                                  |                                   |                                    |                                    |                                    | 1                                  | 1                                  |                                    | 6                                  |                                    |                                    |                                    |                                    |                             | 23          |
|                                               |                                  |                                   |                                    |                                    |                                    | 1                                  | 1                                  |                                    | 6                                  | 2                                  |                                    |                                    |                                    |                             | 24          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  | 1                                  | 6                                  |                                    |                                    |                                    |                             | 25          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 1                                  | 9                                  | 14                                 | 23                                 | 7                                  | 8                                  |                                    |                             | 26          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 1                                  | 9                                  | 16                                 | 21                                 | 7                                  | 9                                  | 4                                  | 4                           | 27          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 8                                  | 17                                 | 19                                 | 8                                  | 9                                  | 7                                  |                             | 28          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 7                                  | 19                                 | 21                                 | 6                                  | 9                                  | 7                                  |                             | 29          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 2                                  | 5                                  | 6                                  | 21                                 | 16                                 | 10                                 | 7                                  | 2                           | 30          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 2                                  | 5                                  | 5                                  | 21                                 | 17                                 | 10                                 | 7                                  | 2                           | 31          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 2                                  | 9                                  | 9                                  | 21                                 | 4                                  | 8                                  | 8                                  | 3                           | 32          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 1                                  | 10                                 | 25                                 | 7                                  | 9                                  | 9                                  | 3                           | 33          |
|                                               |                                  |                                   |                                    |                                    |                                    | 2                                  |                                    | 5                                  | 9                                  | 18                                 | 18                                 | 14                                 | 4                                  | 5                           | 34          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    | 14                                 | 31                                 | 145                                | 73                                 | 76                                 | 55                                 | 64                                 | 2                                  |                                    |                                    |                             | 35          |
|                                               |                                  |                                   |                                    | 14                                 | 45                                 | 48                                 | 178                                | 55                                 | 62                                 | 26                                 | 1                                  |                                    |                                    |                             | 36          |
|                                               |                                  |                                   |                                    | 14                                 | 4                                  | 98                                 | 145                                | 69                                 | 18                                 | 78                                 | 6                                  |                                    |                                    |                             | 37          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    | 10                                 | 4                                  | 84                                 | 123                                | 71                                 | 22                                 | 72                                 | 6                                  |                                    |                                    |                             | 38          |
|                                               |                                  |                                   |                                    | 10                                 | 15                                 | 30                                 | 35                                 | 162                                | 34                                 | 89                                 | 18                                 |                                    |                                    |                             | 39          |
|                                               |                                  |                                   |                                    |                                    | 10                                 | 15                                 | 29                                 | 45                                 | 184                                | 35                                 | 18                                 |                                    |                                    |                             | 40          |
|                                               |                                  |                                   |                                    | 7                                  | 15                                 | 9                                  | 11                                 | 30                                 | 165                                | 57                                 | 12                                 |                                    |                                    |                             | 41          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    | 7                                  | 10                                 | 8                                  | 11                                 | 37                                 | 180                                | 69                                 | 12                                 |                                    |                                    |                             | 42          |
|                                               |                                  |                                   |                                    | 10                                 | 16                                 | 22                                 | 8                                  | 39                                 | 87                                 | 101                                | 110                                | 13                                 |                                    |                             | 43          |

TABLE K.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1910 TO 1915—

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |     |                      |      |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|-----|----------------------|------|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72  | Over 72 and under 84 | 84   |
| 1        | Laborers:                         | 1910  | 355                  | 66.8                              | \$0.159                         | \$10.68                            |                                                |                      |                 | 89 | 206                  | 35  | 2                    | 23   |
| 2        | 11 plants.....                    | 1911  | 274                  | 66.2                              | .158                            | 10.51                              |                                                |                      |                 | 70 | 142                  | 50  | 9                    | 3    |
| 3        |                                   | 1912  | 287                  | 68.3                              | .160                            | 11.04                              |                                                |                      |                 | 73 | 129                  | 48  | 20                   | 1 17 |
| 4        | 11 plants.....                    | 1912  | 339                  | 68.9                              | .161                            | 11.17                              |                                                |                      |                 | 73 | 123                  | 105 | 20                   | 2 18 |
| 5        |                                   | 1913  | 349                  | 69.3                              | .181                            | 12.62                              |                                                |                      |                 | 78 | 124                  | 113 | 11                   | 3 23 |
| 6        | 10 plants.....                    | 1913  | 223                  | 68.5                              | .175                            | 12.09                              |                                                |                      |                 | 77 | 67                   | 56  | 9                    | 3 19 |
| 7        |                                   | 1914  | 190                  | 67.9                              | .174                            | 11.93                              |                                                | 7                    |                 | 45 | 58                   | 47  | 27                   | 6    |
| 8        | 12 plants.....                    | 1914  | 216                  | 67.6                              | .174                            | 11.85                              |                                                | 14                   |                 | 45 | 65                   | 59  | 27                   | 6    |
| 9        |                                   | 1915  | 208                  | 66.7                              | .174                            | 11.66                              |                                                | 20                   | 15              | 39 | 60                   | 39  | 28                   | 7    |
| 10       | Unclassified—productive:          |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |      |
| 11       | 13 plants.....                    | 1914  | 565                  | 69.1                              | .229                            | 15.91                              |                                                |                      | 1               | 6  | 267                  | 252 | 27                   | 12   |
|          |                                   | 1915  | 552                  | 69.1                              | .237                            | 16.45                              |                                                |                      | 2               | 9  | 255                  | 244 | 30                   | 12   |
| 12       | Unclassified—nonproductive:       |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |      |
| 13       | 12 plants.....                    | 1914  | 551                  | 70.3                              | .219                            | 15.29                              |                                                | 1                    | 44              | 44 | 164                  | 182 | 41                   | 75   |
|          |                                   | 1915  | 521                  | 69.8                              | .229                            | 15.87                              |                                                | 17                   | 46              | 46 | 115                  | 193 | 32                   | 72   |

<sup>1</sup> Including 15 employees whose full-time hours per week were 91.<sup>2</sup> Including 9 employees whose full-time hours per week were 91.



## 252 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

TABLE L.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—

[The abbreviation "G. L. and M. W." stands for "Great Lakes and

| Line No. | Occupation, district, and number of plants.                             | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |
|----------|-------------------------------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|
|          |                                                                         |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 |
| 1        | Charging-crane and charging-machine operators—Eastern—<br>2 plants..... | 1913  | 10                   | 66.8                              | \$0.235                         | \$15.72                            |                                                |                      |                 |    | 10                   |    |                      |
|          |                                                                         | 1914  | 10                   | 65.6                              | .210                            | 13.77                              |                                                |                      |                 |    | 10                   |    |                      |
| 3        | 3 plants.....                                                           | 1914  | 16                   | 65.3                              | .227                            | 14.86                              |                                                |                      |                 |    | 16                   |    |                      |
| 4        |                                                                         | 1915  | 16                   | 65.3                              | .238                            | 15.56                              |                                                |                      |                 |    | 16                   |    |                      |
| 5        | Pittsburgh—<br>4 plants.....                                            | 1913  | 24                   | 72.5                              | .366                            | 26.59                              |                                                |                      |                 |    | 4                    | 8  | 12                   |
| 6        |                                                                         | 1914  | 20                   | 72.5                              | .351                            | 25.49                              |                                                |                      |                 |    | 4                    | 6  | 10                   |
| 7        | 5 plants.....                                                           | 1914  | 24                   | 73.3                              | .360                            | 26.49                              |                                                |                      |                 |    | 4                    | 6  | 14                   |
| 8        |                                                                         | 1915  | 26                   | 73.3                              | .391                            | 28.77                              |                                                |                      |                 |    | 4                    | 6  | 16                   |
| 19       | G. L. and M. W.—<br>4 plants.....                                       | 1913  | 12                   | 70.5                              | .373                            | 26.01                              |                                                |                      |                 |    | 2                    | 10 |                      |
| 10       |                                                                         | 1914  | 12                   | 70.5                              | .301                            | 21.20                              |                                                |                      |                 |    | 2                    | 10 |                      |
| 1        |                                                                         | 1915  | 12                   | 70.5                              | .317                            | 22.18                              |                                                |                      |                 |    | 2                    | 10 |                      |
| 12       | Total—<br>10 plants.....                                                | 1913  | 46                   | 70.7                              | .339                            | 24.07                              |                                                |                      |                 |    | 16                   | 18 | 12                   |
| 13       |                                                                         | 1914  | 42                   | 70.3                              | .303                            | 21.47                              |                                                |                      |                 |    | 16                   | 16 | 10                   |
| 14       | 12 plants.....                                                          | 1914  | 52                   | 70.2                              | .306                            | 21.69                              |                                                |                      |                 |    | 22                   | 16 | 14                   |
| 15       |                                                                         | 1915  | 54                   | 70.3                              | .329                            | 23.39                              |                                                |                      |                 |    | 22                   | 16 | 16                   |
| 16       | Heaters:<br>Eastern—<br>2 plants.....                                   | 1913  | 18                   | 67.6                              | .426                            | 28.97                              |                                                |                      |                 |    | 14                   | 4  |                      |
| 17       |                                                                         | 1914  | 17                   | 67.7                              | .404                            | 27.61                              |                                                |                      |                 |    | 13                   | 4  |                      |
| 18       | 3 plants.....                                                           | 1914  | 27                   | 65.9                              | .466                            | 30.83                              |                                                |                      |                 |    | 23                   | 4  |                      |
| 19       |                                                                         | 1915  | 26                   | 66.1                              | .447                            | 29.68                              |                                                |                      |                 |    | 22                   | 4  |                      |
| 20       | Pittsburgh—<br>5 plants.....                                            | 1913  | 25                   | 74.3                              | .631                            | 47.12                              |                                                |                      |                 |    | 5                    | 4  | 16                   |
| 21       |                                                                         | 1914  | 24                   | 75.3                              | .616                            | 46.48                              |                                                |                      |                 |    | 6                    | 2  | 12                   |
| 22       | 6 plants.....                                                           | 1914  | 26                   | 75.4                              | .610                            | 46.11                              |                                                |                      |                 |    | 6                    | 2  | 14                   |
| 23       |                                                                         | 1915  | 26                   | 75.3                              | .668                            | 50.21                              |                                                |                      |                 |    | 6                    | 2  | 14                   |
| 24       | G. L. and M. W.—<br>4 plants.....                                       | 1913  | 11                   | 72.6                              | .625                            | 44.77                              |                                                |                      |                 |    | 2                    | 6  | 3                    |
| 25       |                                                                         | 1914  | 11                   | 70.4                              | .489                            | 34.27                              |                                                |                      |                 |    | 2                    | 9  |                      |
| 26       |                                                                         | 1915  | 9                    | 70.1                              | .555                            | 38.52                              |                                                |                      |                 |    | 2                    | 7  |                      |
| 27       | Total—<br>11 plants.....                                                | 1913  | 54                   | 71.7                              | .562                            | 40.59                              |                                                |                      |                 |    | 21                   | 14 | 19                   |
| 28       |                                                                         | 1914  | 52                   | 71.8                              | .520                            | 37.73                              |                                                |                      |                 |    | 21                   | 15 | 12                   |
| 29       | 13 plants.....                                                          | 1914  | 64                   | 70.5                              | .529                            | 37.63                              |                                                |                      |                 |    | 31                   | 15 | 14                   |
| 30       |                                                                         | 1915  | 61                   | 70.6                              | .557                            | 39.73                              |                                                |                      |                 |    | 30                   | 13 | 14                   |
| 31       | Heaters' helpers:<br>Eastern—<br>2 plants.....                          | 1913  | 50                   | 66.3                              | .203                            | 13.46                              |                                                |                      |                 |    | 50                   |    |                      |
| 32       |                                                                         | 1914  | 45                   | 66.0                              | .186                            | 11.64                              |                                                |                      |                 |    | 45                   |    |                      |
| 33       | 3 plants.....                                                           | 1914  | 52                   | 65.1                              | .205                            | 12.81                              |                                                |                      |                 |    | 52                   |    |                      |
| 34       |                                                                         | 1915  | 50                   | 65.2                              | .200                            | 13.02                              |                                                |                      |                 |    | 50                   |    |                      |
| 35       | Pittsburgh—<br>5 plants.....                                            | 1913  | 41                   | 70.9                              | .270                            | 19.52                              |                                                |                      |                 |    | 19                   | 8  | 14                   |
| 36       |                                                                         | 1914  | 44                   | 70.0                              | .280                            | 19.89                              |                                                |                      |                 |    | 26                   | 4  | 14                   |
| 37       | 6 plants.....                                                           | 1914  | 46                   | 70.1                              | .284                            | 20.20                              |                                                |                      |                 |    | 26                   | 6  | 14                   |
| 38       |                                                                         | 1915  | 45                   | 69.8                              | .309                            | 21.84                              |                                                |                      |                 |    | 26                   | 5  | 14                   |
| 39       | G. L. and M. W.—<br>3 plants.....                                       | 1913  | 14                   | 69.3                              | .375                            | 25.44                              |                                                |                      |                 |    | 7                    | 4  | 3                    |
| 40       |                                                                         | 1914  | 14                   | 69.3                              | .282                            | 19.48                              |                                                |                      |                 |    | 7                    | 4  | 3                    |
| 41       |                                                                         | 1915  | 14                   | 69.3                              | .346                            | 23.74                              |                                                |                      |                 |    | 7                    | 4  | 3                    |



AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
PLATE MILLS.

Middle West." The figures for each group of years are for identical plants.]

| Employees whose rates of wages per hour were— |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | Line<br>No.                 |    |
|-----------------------------------------------|----------------------------------|-----------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|-----------------------------|----|
| 7<br>and<br>under<br>8<br>cents.              | 8<br>and<br>under<br>9<br>cents. | 9<br>and<br>under<br>10<br>cents. | 10<br>and<br>under<br>12<br>cents. | 12<br>and<br>under<br>14<br>cents. | 14<br>and<br>under<br>16<br>cents. | 16<br>and<br>under<br>18<br>cents. | 18<br>and<br>under<br>20<br>cents. | 20<br>and<br>under<br>25<br>cents. | 25<br>and<br>under<br>30<br>cents. | 30<br>and<br>under<br>40<br>cents. | 40<br>and<br>under<br>50<br>cents. | 50<br>and<br>under<br>60<br>cents. | 60<br>and<br>under<br>70<br>cents. | 70<br>cents<br>and<br>over. |    |
|                                               |                                  |                                   |                                    |                                    |                                    | 2                                  | 2                                  | 6                                  | 2                                  |                                    |                                    |                                    |                                    |                             | 1  |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 1                                  | 5                                  | 2                                  |                                    |                                    |                                    |                                    |                             | 2  |
|                                               |                                  |                                   |                                    |                                    |                                    | 2                                  | 3                                  | 7                                  | 2                                  | 2                                  |                                    |                                    |                                    |                             | 3  |
|                                               |                                  |                                   |                                    |                                    | 2                                  | 3                                  | 1                                  | 3                                  | 5                                  | 2                                  |                                    |                                    |                                    |                             | 4  |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 4                                  |                                    | 12                                 |                                    |                                    |                                    |                             | 5  |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 4                                  |                                    | 9                                  | 8                                  |                                    |                                    |                             | 6  |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 4                                  |                                    |                                    | 7                                  |                                    |                                    |                             |    |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  | 3                                  | 11                                 | 9                                  | 2                                  | 1                                  |                             | 7  |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 6                                  |                                    | 4                                  | 1                                  | 1                                  |                             | 8  |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 7                                  | 5                                  |                                    |                                    |                                    |                             | 9  |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 7                                  | 3                                  | 2                                  |                                    |                                    |                             | 10 |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 11 |
|                                               |                                  |                                   |                                    |                                    |                                    | 2                                  | 2                                  | 10                                 | 8                                  | 12                                 | 12                                 | 1                                  | 1                                  |                             | 12 |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 1                                  | 9                                  | 9                                  | 14                                 | 7                                  |                                    |                                    |                             | 13 |
|                                               |                                  |                                   |                                    |                                    |                                    | 2                                  | 3                                  | 11                                 | 9                                  | 15                                 | 9                                  |                                    |                                    |                             | 14 |
|                                               |                                  |                                   |                                    |                                    | 2                                  | 3                                  | 1                                  | 5                                  | 13                                 | 14                                 | 11                                 | 2                                  | 1                                  |                             | 15 |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |    |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 1                                  | 1                                  | 6                                  | 8                                  | 4                                  |                                    |                             | 16 |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 11                                 |                                    | 2                                  | 2                                  |                             | 17 |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 10                                 | 4                                  | 8                                  | 4                                  |                             | 18 |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    | 10                                 | 4                                  | 4                                  | 6                                  |                             | 19 |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 9                                  | 6                                  | 8                           | 20 |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 13                                 | 9                                  | 2                           | 21 |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 15                                 | 9                                  | 2                           | 22 |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 7                                  | 6                                  | 13                          | 23 |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 3                                  | 2                                  | 2                                  | 4                           | 24 |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 7                                  | 4                                  |                                    |                             | 25 |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 5                                  | 2                                  |                                    | 2                           | 26 |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |    |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 1                                  | 1                                  | 6                                  | 13                                 | 15                                 | 8                                  | 12                          | 27 |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 11                                 | 7                                  | 19                                 | 11                                 | 2                           | 28 |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 10                                 | 11                                 | 27                                 | 13                                 | 2                           | 29 |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    | 10                                 | 9                                  | 13                                 | 12                                 | 15                          | 30 |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |    |
|                                               |                                  |                                   |                                    |                                    |                                    | 16                                 | 6                                  | 24                                 | 4                                  |                                    |                                    |                                    |                                    |                             | 31 |
|                                               |                                  |                                   | 2                                  | 4                                  | 3                                  | 12                                 | 8                                  | 15                                 | 1                                  |                                    |                                    |                                    |                                    |                             | 32 |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |    |
|                                               |                                  |                                   | 2                                  | 2                                  | 3                                  | 11                                 | 8                                  | 17                                 | 9                                  |                                    |                                    |                                    |                                    |                             | 33 |
|                                               |                                  |                                   |                                    | 12                                 | 4                                  | 8                                  | 4                                  | 8                                  | 13                                 | 1                                  |                                    |                                    |                                    |                             | 34 |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 2                                  | 21                                 | 4                                  | 10                                 | 4                                  |                                    |                                    |                             | 35 |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 20                                 | 11                                 | 9                                  | 4                                  |                                    |                                    |                             | 36 |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |    |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 26                                 | 11                                 | 11                                 | 4                                  |                                    |                                    |                             | 37 |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 6                                  | 15                                 | 18                                 | 5                                  | 1                                  |                                    |                             | 38 |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |    |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 5                                  | 2                                  | 7                                  |                                    |                                    |                             | 39 |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 12                                 | 2                                  | 2                                  |                                    |                                    |                             | 40 |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 8                                  | 4                                  |                                    |                                    |                             | 41 |

TABLE L.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—PLATE

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |       |                      |       |                      |       |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-------|----------------------|-------|----------------------|-------|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60    | Over 60 and under 72 | 72    | Over 72 and under 84 | 84    |
|          | Heaters' helpers—Con. Total—                |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 1        | 10 plants.....                              | 1913  | 105                  | 68.5                              | \$0.252                         | \$17.42                            | .....                                          | .....                | .....           | ..... | 76                   | 12    | 17                   | ..... |
| 2        |                                             | 1914  | 103                  | 68.2                              | .239                            | 16.23                              | .....                                          | .....                | .....           | ..... | 78                   | 8     | 17                   | ..... |
| 3        | 12 plants.....                              | 1914  | 112                  | 67.7                              | .247                            | 16.68                              | .....                                          | .....                | .....           | ..... | 85                   | 10    | 17                   | ..... |
| 4        |                                             | 1915  | 109                  | 67.6                              | .264                            | 18.04                              | .....                                          | .....                | .....           | ..... | 83                   | 9     | 17                   | ..... |
|          | Roll engineers: Eastern—                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 5        | 2 plants.....                               | 1913  | 10                   | 65.6                              | .257                            | 16.86                              | .....                                          | .....                | .....           | ..... | 10                   | ..... | .....                | ..... |
| 6        |                                             | 1914  | 9                    | 65.6                              | .256                            | 16.79                              | .....                                          | .....                | .....           | ..... | 9                    | ..... | .....                | ..... |
| 7        | 3 plants.....                               | 1914  | 13                   | 65.3                              | .281                            | 18.38                              | .....                                          | .....                | .....           | ..... | 13                   | ..... | .....                | ..... |
| 8        |                                             | 1915  | 16                   | 65.3                              | .269                            | 17.60                              | .....                                          | .....                | .....           | ..... | 16                   | ..... | .....                | ..... |
| 9        | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 10       | 5 plants.....                               | 1913  | 15                   | 76.4                              | .337                            | 25.63                              | .....                                          | .....                | .....           | ..... | 3                    | 2     | 6                    | 4     |
|          |                                             | 1914  | 14                   | 72.7                              | .329                            | 23.80                              | .....                                          | .....                | .....           | ..... | 4                    | 4     | 4                    | 2     |
| 11       | 6 plants.....                               | 1914  | 16                   | 73.2                              | .322                            | 23.46                              | .....                                          | .....                | .....           | ..... | 4                    | 4     | 6                    | 2     |
| 12       |                                             | 1915  | 16                   | 73.1                              | .339                            | 24.62                              | .....                                          | .....                | .....           | ..... | 4                    | 4     | 6                    | 2     |
| 13       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 13       | 4 plants.....                               | 1913  | 9                    | 73.3                              | .318                            | 23.35                              | .....                                          | .....                | .....           | ..... | .....                | 8     | .....                | 1     |
| 14       |                                             | 1914  | 9                    | 72.0                              | .316                            | 22.73                              | .....                                          | .....                | .....           | ..... | .....                | 9     | .....                | ..... |
| 15       |                                             | 1915  | 7                    | 72.0                              | .329                            | 23.72                              | .....                                          | .....                | .....           | ..... | .....                | 7     | .....                | ..... |
|          | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 16       | 11 plants.....                              | 1913  | 34                   | 72.4                              | .308                            | 22.45                              | .....                                          | .....                | .....           | ..... | 13                   | 10    | 6                    | 5     |
| 17       |                                             | 1914  | 32                   | 70.5                              | .305                            | 21.53                              | .....                                          | .....                | .....           | ..... | 13                   | 13    | 4                    | 2     |
| 18       | 13 plants.....                              | 1914  | 38                   | 70.2                              | .307                            | 21.55                              | .....                                          | .....                | .....           | ..... | 17                   | 13    | 6                    | 2     |
| 19       |                                             | 1915  | 39                   | 69.7                              | .309                            | 21.58                              | .....                                          | .....                | .....           | ..... | 20                   | 11    | 6                    | ..... |
|          | Rollers, sheared-plate mills: Eastern—      |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 20       | 2 plants.....                               | 1913  | 8                    | 65.6                              | .491                            | 32.26                              | .....                                          | .....                | .....           | ..... | 8                    | ..... | .....                | ..... |
| 21       |                                             | 1914  | 8                    | 65.6                              | .415                            | 27.28                              | .....                                          | .....                | .....           | ..... | 8                    | ..... | .....                | ..... |
| 22       | 3 plants.....                               | 1914  | 10                   | 65.1                              | .524                            | 33.92                              | .....                                          | .....                | .....           | ..... | 10                   | ..... | .....                | ..... |
| 23       |                                             | 1915  | 10                   | 65.1                              | .487                            | 31.56                              | .....                                          | .....                | .....           | ..... | 10                   | ..... | .....                | ..... |
| 24       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 24       | 5 plants.....                               | 1913  | 13                   | 70.5                              | .719                            | 50.74                              | .....                                          | .....                | .....           | ..... | 3                    | 10    | .....                | ..... |
| 25       |                                             | 1914  | 12                   | 69.9                              | .848                            | 59.20                              | .....                                          | .....                | .....           | ..... | 4                    | 8     | .....                | ..... |
| 26       | 6 plants.....                               | 1914  | 14                   | 70.2                              | .812                            | 56.87                              | .....                                          | .....                | .....           | ..... | 4                    | 10    | .....                | ..... |
| 27       |                                             | 1915  | 14                   | 70.1                              | .870                            | 60.60                              | .....                                          | .....                | .....           | ..... | 4                    | 10    | .....                | ..... |
| 28       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 28       | 2 plants.....                               | 1913  | 4                    | 67.6                              | 1.398                           | 92.78                              | .....                                          | .....                | .....           | ..... | 2                    | 2     | .....                | ..... |
| 29       |                                             | 1914  | 4                    | 67.6                              | .770                            | 51.76                              | .....                                          | .....                | .....           | ..... | 2                    | 2     | .....                | ..... |
| 30       |                                             | 1915  | 4                    | 67.6                              | .875                            | 58.26                              | .....                                          | .....                | .....           | ..... | 2                    | 2     | .....                | ..... |
|          | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 31       | 9 plants.....                               | 1913  | 25                   | 68.5                              | .755                            | 51.55                              | .....                                          | .....                | .....           | ..... | 13                   | 12    | .....                | ..... |
| 32       |                                             | 1914  | 24                   | 68.1                              | .691                            | 47.32                              | .....                                          | .....                | .....           | ..... | 14                   | 10    | .....                | ..... |
| 33       | 11 plants.....                              | 1914  | 28                   | 68.0                              | .703                            | 47.94                              | .....                                          | .....                | .....           | ..... | 16                   | 12    | .....                | ..... |
| 34       |                                             | 1915  | 28                   | 67.9                              | .734                            | 49.89                              | .....                                          | .....                | .....           | ..... | 16                   | 12    | .....                | ..... |
|          | Screw men, sheared-plate mills: Eastern—    |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 35       | 2 plants.....                               | 1913  | 7                    | 66.2                              | .353                            | 23.38                              | .....                                          | .....                | .....           | ..... | 7                    | ..... | .....                | ..... |
| 36       |                                             | 1914  | 7                    | 66.2                              | .277                            | 18.34                              | .....                                          | .....                | .....           | ..... | 7                    | ..... | .....                | ..... |
| 37       | 2 plants.....                               | 1914  | 6                    | 65.5                              | .278                            | 18.25                              | .....                                          | .....                | .....           | ..... | 6                    | ..... | .....                | ..... |
| 38       |                                             | 1915  | 6                    | 65.5                              | .292                            | 19.14                              | .....                                          | .....                | .....           | ..... | 6                    | ..... | .....                | ..... |
| 39       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 39       | 5 plants.....                               | 1913  | 14                   | 70.2                              | .472                            | 33.34                              | .....                                          | .....                | .....           | ..... | 4                    | 10    | .....                | ..... |
| 40       |                                             | 1914  | 14                   | 69.4                              | .491                            | 34.46                              | .....                                          | .....                | .....           | ..... | 6                    | 8     | .....                | ..... |
| 41       | 6 plants.....                               | 1914  | 16                   | 69.7                              | .487                            | 34.26                              | .....                                          | .....                | .....           | ..... | 6                    | 10    | .....                | ..... |
| 42       |                                             | 1915  | 16                   | 69.4                              | .517                            | 36.13                              | .....                                          | .....                | .....           | ..... | 6                    | 10    | .....                | ..... |
| 43       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 43       | 2 plants.....                               | 1913  | 6                    | 69.1                              | .682                            | 46.93                              | .....                                          | .....                | .....           | ..... | 2                    | 4     | .....                | ..... |
| 44       |                                             | 1914  | 6                    | 69.1                              | .448                            | 30.76                              | .....                                          | .....                | .....           | ..... | 2                    | 4     | .....                | ..... |
| 45       |                                             | 1915  | 4                    | 67.6                              | .580                            | 38.74                              | .....                                          | .....                | .....           | ..... | 2                    | 2     | .....                | ..... |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
MILLS—Continued.

| Employees whose rates of wages per hour were— |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | Line<br>No. |
|-----------------------------------------------|----------------------------------|-----------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|----------------------------|-------------|
| 7<br>and<br>under<br>8<br>cents.              | 8<br>and<br>under<br>9<br>cents. | 9<br>and<br>under<br>10<br>cents. | 10<br>and<br>under<br>12<br>cents. | 12<br>and<br>under<br>14<br>cents. | 14<br>and<br>under<br>16<br>cents. | 16<br>and<br>under<br>18<br>cents. | 18<br>and<br>under<br>20<br>cents. | 20<br>and<br>under<br>25<br>cents. | 25<br>and<br>under<br>30<br>cents. | 30<br>and<br>under<br>40<br>cents. | 40<br>and<br>under<br>50<br>cents. | 50<br>and<br>under<br>60<br>cents. | 60<br>and<br>under<br>70<br>cents. | 70<br>cents<br>and<br>over |             |
|                                               |                                  |                                   | 2                                  | 4                                  | 3                                  | 16<br>12                           | 8<br>8                             | 45<br>35                           | 13<br>24                           | 12<br>11                           | 11<br>4                            |                                    |                                    |                            | 1           |
|                                               |                                  |                                   | 2                                  | 2<br>12                            | 3<br>4                             | 11<br>8                            | 8<br>4                             | 37<br>14                           | 32<br>30                           | 13<br>27                           | 4<br>9                             | 1                                  |                                    |                            | 2           |
|                                               |                                  |                                   |                                    |                                    |                                    | 1                                  | 2<br>1                             | 3<br>4                             | 2<br>2                             | 2<br>2                             |                                    |                                    |                                    |                            | 3           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 1<br>4                             | 6<br>5                             | 2<br>2                             | 2<br>2                             | 2<br>2                             |                                    |                                    |                            | 4           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 7<br>6                             | 4<br>6                             | 4<br>2                             |                                    |                                    |                            | 5           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 8<br>8                             | 6<br>4                             | 2<br>3                             | 1                                  |                                    |                            | 6           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 4<br>4<br>2                        | 5<br>5<br>5                        |                                    |                                    |                                    |                            | 7           |
|                                               |                                  |                                   |                                    |                                    |                                    | 1                                  | 2<br>1                             | 3<br>4                             | 13<br>12                           | 11<br>13                           | 4<br>2                             |                                    |                                    |                            | 8           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 1<br>4                             | 6<br>5                             | 14<br>12                           | 1<br>11                            | 4<br>5                             | 1                                  |                                    |                            | 9           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2<br>5                             | 4<br>1                             |                                    | 2<br>1                             |                            | 10          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 11          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 12          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 13          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 14          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 15          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 16          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 17          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 18          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 19          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 20          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 21          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 22          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 23          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 24          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 25          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 26          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 27          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 28          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 29          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 30          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 31          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 32          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 33          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 34          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 35          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 36          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 37          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 38          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 39          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 40          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 41          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 42          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 43          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 44          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                            | 45          |

TABLE L.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—PLATE

| Line<br>No. | Occupation, district,<br>and number of plants. | Year. | Number<br>of em-<br>ploy-<br>ees. | Average<br>full-<br>time<br>hours<br>per<br>week. | Average<br>rate<br>of<br>wages<br>per<br>hour. | Average<br>full-<br>time<br>week-<br>ly<br>earn-<br>ings. | Employees whose full-time hours per<br>week were— |                                  |                          |    |                                  |    |                                  |
|-------------|------------------------------------------------|-------|-----------------------------------|---------------------------------------------------|------------------------------------------------|-----------------------------------------------------------|---------------------------------------------------|----------------------------------|--------------------------|----|----------------------------------|----|----------------------------------|
|             |                                                |       |                                   |                                                   |                                                |                                                           | 48<br>and<br>under.                               | Over<br>48<br>and<br>under<br>56 | 56<br>and<br>under<br>60 | 60 | Over<br>60<br>and<br>under<br>72 | 72 | Over<br>72<br>and<br>under<br>84 |
|             | Screw men, sheared-<br>plate mills—Concid.     |       |                                   |                                                   |                                                |                                                           |                                                   |                                  |                          |    |                                  |    |                                  |
| 1           | Total—                                         | 1913  | 27                                | 68.9                                              | \$0.488                                        | \$33.78                                                   |                                                   |                                  |                          |    | 13                               | 14 |                                  |
| 2           | 9 plants.....                                  | 1914  | 27                                | 68.5                                              | .426                                           | 29.46                                                     |                                                   |                                  |                          |    | 15                               | 12 |                                  |
| 3           | 10 plants.....                                 | 1914  | 28                                | 68.7                                              | .434                                           | 30.08                                                     |                                                   |                                  |                          |    | 14                               | 14 |                                  |
| 4           |                                                | 1915  | 26                                | 68.3                                              | .474                                           | 32.61                                                     |                                                   |                                  |                          |    | 14                               | 12 |                                  |
|             | Table operators,<br>sheared-plate mills:       |       |                                   |                                                   |                                                |                                                           |                                                   |                                  |                          |    |                                  |    |                                  |
| 5           | Eastern—                                       |       |                                   |                                                   |                                                |                                                           |                                                   |                                  |                          |    |                                  |    |                                  |
| 6           | 2 plants.....                                  | 1913  | 8                                 | 65.6                                              | .281                                           | 18.44                                                     |                                                   |                                  |                          |    | 8                                |    |                                  |
|             |                                                | 1914  | 7                                 | 65.7                                              | .254                                           | 16.67                                                     |                                                   |                                  |                          |    | 7                                |    |                                  |
| 7           | 3 plants.....                                  | 1914  | 9                                 | 65.1                                              | .233                                           | 15.23                                                     |                                                   |                                  |                          |    | 9                                |    |                                  |
| 8           |                                                | 1915  | 10                                | 65.1                                              | .219                                           | 14.31                                                     |                                                   |                                  |                          |    | 10                               |    |                                  |
| 9           | Pittsburgh—                                    |       |                                   |                                                   |                                                |                                                           |                                                   |                                  |                          |    |                                  |    |                                  |
| 10          | 5 plants.....                                  | 1913  | 15                                | 69.9                                              | .341                                           | 24.07                                                     |                                                   |                                  |                          |    | 5                                | 10 |                                  |
|             |                                                | 1914  | 14                                | 69.3                                              | .364                                           | 25.52                                                     |                                                   |                                  |                          |    | 6                                | 8  |                                  |
| 11          | 6 plants.....                                  | 1914  | 16                                | 69.6                                              | .365                                           | 25.73                                                     |                                                   |                                  |                          |    | 6                                | 10 |                                  |
| 12          |                                                | 1915  | 16                                | 69.5                                              | .386                                           | 27.12                                                     |                                                   |                                  |                          |    | 6                                | 10 |                                  |
| 13          | G. L. and M. W.—                               |       |                                   |                                                   |                                                |                                                           |                                                   |                                  |                          |    |                                  |    |                                  |
| 14          | 2 plants.....                                  | 1913  | 8                                 | 67.6                                              | .488                                           | 32.79                                                     |                                                   |                                  |                          |    | 4                                | 4  |                                  |
|             |                                                | 1914  | 6                                 | 66.2                                              | .314                                           | 20.83                                                     |                                                   |                                  |                          |    | 4                                | 2  |                                  |
| 15          |                                                | 1915  | 6                                 | 66.2                                              | .374                                           | 24.55                                                     |                                                   |                                  |                          |    | 4                                | 2  |                                  |
| 16          | Total—                                         |       |                                   |                                                   |                                                |                                                           |                                                   |                                  |                          |    |                                  |    |                                  |
| 17          | 9 plants.....                                  | 1913  | 31                                | 68.2                                              | .363                                           | 24.87                                                     |                                                   |                                  |                          |    | 17                               | 14 |                                  |
|             |                                                | 1914  | 27                                | 67.7                                              | .324                                           | 22.18                                                     |                                                   |                                  |                          |    | 17                               | 10 |                                  |
| 18          | 11 plants.....                                 | 1914  | 31                                | 67.6                                              | .317                                           | 21.73                                                     |                                                   |                                  |                          |    | 19                               | 12 |                                  |
| 19          |                                                | 1915  | 32                                | 67.5                                              | .332                                           | 22.63                                                     |                                                   |                                  |                          |    | 20                               | 12 |                                  |
|             | Hook men, sheared-<br>plate mill:              |       |                                   |                                                   |                                                |                                                           |                                                   |                                  |                          |    |                                  |    |                                  |
| 20          | Eastern—                                       |       |                                   |                                                   |                                                |                                                           |                                                   |                                  |                          |    |                                  |    |                                  |
| 21          | 2 plants.....                                  | 1913  | 27                                | 66.3                                              | .241                                           | 15.99                                                     |                                                   |                                  |                          |    | 27                               |    |                                  |
|             |                                                | 1914  | 23                                | 66.4                                              | .216                                           | 14.33                                                     |                                                   |                                  |                          |    | 23                               |    |                                  |
| 22          | 3 plants.....                                  | 1914  | 22                                | 65.5                                              | .226                                           | 14.80                                                     |                                                   |                                  |                          |    | 22                               |    |                                  |
| 23          |                                                | 1915  | 24                                | 65.5                                              | .208                                           | 13.62                                                     |                                                   |                                  |                          |    | 24                               |    |                                  |
| 24          | Pittsburgh—                                    |       |                                   |                                                   |                                                |                                                           |                                                   |                                  |                          |    |                                  |    |                                  |
| 25          | 5 plants.....                                  | 1913  | 30                                | 69.9                                              | .299                                           | 21.07                                                     |                                                   |                                  |                          |    | 10                               | 20 |                                  |
|             |                                                | 1914  | 30                                | 69.1                                              | .315                                           | 22.02                                                     |                                                   |                                  |                          |    | 14                               | 16 |                                  |
| 26          | 6 plants.....                                  | 1914  | 40                                | 69.8                                              | .331                                           | 23.32                                                     |                                                   |                                  |                          |    | 14                               | 26 |                                  |
| 27          |                                                | 1915  | 40                                | 69.6                                              | .371                                           | 26.11                                                     |                                                   |                                  |                          |    | 14                               | 26 |                                  |
| 28          | G. L. and M. W.—                               |       |                                   |                                                   |                                                |                                                           |                                                   |                                  |                          |    |                                  |    |                                  |
| 29          | 2 plants.....                                  | 1913  | 19                                | 69.2                                              | .439                                           | 30.21                                                     |                                                   |                                  |                          |    | 6                                | 13 |                                  |
|             |                                                | 1914  | 12                                | 67.6                                              | .298                                           | 20.15                                                     |                                                   |                                  |                          |    | 6                                | 6  |                                  |
| 30          |                                                | 1915  | 12                                | 67.6                                              | .332                                           | 22.30                                                     |                                                   |                                  |                          |    | 6                                | 6  |                                  |
| 31          | Total—                                         |       |                                   |                                                   |                                                |                                                           |                                                   |                                  |                          |    |                                  |    |                                  |
| 32          | 9 plants.....                                  | 1913  | 76                                | 68.4                                              | .313                                           | 21.55                                                     |                                                   |                                  |                          |    | 43                               | 33 |                                  |
|             |                                                | 1914  | 65                                | 67.9                                              | .277                                           | 18.95                                                     |                                                   |                                  |                          |    | 43                               | 22 |                                  |
| 33          | 11 plants.....                                 | 1914  | 74                                | 68.2                                              | .294                                           | 20.27                                                     |                                                   |                                  |                          |    | 42                               | 32 |                                  |
| 34          |                                                | 1915  | 76                                | 68.0                                              | .314                                           | 21.57                                                     |                                                   |                                  |                          |    | 44                               | 32 |                                  |
|             | Roll hands, other,<br>sheared-plate mills:     |       |                                   |                                                   |                                                |                                                           |                                                   |                                  |                          |    |                                  |    |                                  |
| 35          | Eastern—                                       |       |                                   |                                                   |                                                |                                                           |                                                   |                                  |                          |    |                                  |    |                                  |
| 36          | 2 plants.....                                  | 1913  | 6                                 | 67.3                                              | .193                                           | 12.95                                                     |                                                   |                                  |                          |    | 6                                |    |                                  |
|             |                                                | 1914  | 6                                 | 67.3                                              | .169                                           | 11.39                                                     |                                                   |                                  |                          |    | 6                                |    |                                  |
| 37          | 3 plants.....                                  | 1914  | 10                                | 64.1                                              | .232                                           | 14.79                                                     |                                                   |                                  |                          |    | 10                               |    |                                  |
| 38          |                                                | 1915  | 10                                | 64.1                                              | .228                                           | 14.52                                                     |                                                   |                                  |                          |    | 10                               |    |                                  |
| 39          | Pittsburgh—                                    |       |                                   |                                                   |                                                |                                                           |                                                   |                                  |                          |    |                                  |    |                                  |
| 40          | 4 plants.....                                  | 1913  | 12                                | 70.9                                              | .264                                           | 18.83                                                     |                                                   |                                  |                          |    | 2                                | 10 |                                  |
|             |                                                | 1914  | 10                                | 70.7                                              | .290                                           | 20.62                                                     |                                                   |                                  |                          |    | 2                                | 8  |                                  |
| 41          | 5 plants.....                                  | 1914  | 12                                | 70.9                                              | .278                                           | 19.78                                                     |                                                   |                                  |                          |    | 4                                | 8  |                                  |
| 42          |                                                | 1915  | 12                                | 70.9                                              | .289                                           | 20.57                                                     |                                                   |                                  |                          |    | 2                                | 10 |                                  |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
MILLS—Continued.

| Employees whose rates of wages per hour were— |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | Line<br>No. |
|-----------------------------------------------|----------------------------------|-----------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|-----------------------------|-------------|
| 7<br>and<br>under<br>8<br>cents.              | 8<br>and<br>under<br>9<br>cents. | 9<br>and<br>under<br>10<br>cents. | 10<br>and<br>under<br>12<br>cents. | 12<br>and<br>under<br>14<br>cents. | 14<br>and<br>under<br>16<br>cents. | 16<br>and<br>under<br>18<br>cents. | 18<br>and<br>under<br>20<br>cents. | 20<br>and<br>under<br>25<br>cents. | 25<br>and<br>under<br>30<br>cents. | 30<br>and<br>under<br>40<br>cents. | 40<br>and<br>under<br>50<br>cents. | 50<br>and<br>under<br>60<br>cents. | 60<br>and<br>under<br>70<br>cents. | 70<br>cents<br>and<br>over. |             |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  | 2                                  | 11                                 | 2                                  |                                    | 8                                  | 4                           | 1           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  | 5                                  | 7                                  | 6                                  | 1                                  | 2                                  | 4                           | 2           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  | 4                                  | 7                                  | 8                                  | 1                                  | 2                                  | 4                           | 3           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  | 2                                  | 6                                  | 5                                  | 3                                  | 7                                  | 1                           | 4           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 4                                  | 2                                  | 1                                  | 1                                  |                                    |                                    |                             | 5           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 5                                  |                                    | 2                                  |                                    |                                    |                                    |                             | 6           |
|                                               |                                  |                                   |                                    |                                    |                                    | 2                                  |                                    | 5                                  |                                    | 2                                  |                                    |                                    |                                    |                             | 7           |
|                                               |                                  |                                   |                                    |                                    | 4                                  |                                    | 2                                  | 2                                  |                                    | 2                                  |                                    |                                    |                                    |                             | 8           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 1                                  | 5                                  | 3                                  |                                    | 4                                  | 2                                  |                                    |                             | 9           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 3                                  | 5                                  | 2                                  | 3                                  | 3                                  |                                    |                             | 10          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 1                                  | 3                                  | 4                                  | 5                                  | 3                                  |                                    |                             | 11          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 6                                  | 2                                  |                                    |                             | 12          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 5                                  |                                    |                                    |                                    |                             | 13          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 2                                  |                                    |                                    |                             | 14          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 15          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 1                                  | 9                                  | 5                                  | 1                                  | 11                                 | 4                                  |                                    |                             | 16          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 8                                  | 6                                  | 7                                  | 3                                  | 3                                  |                                    |                             | 17          |
|                                               |                                  |                                   |                                    |                                    |                                    | 2                                  |                                    | 8                                  | 6                                  | 9                                  | 3                                  | 3                                  |                                    |                             | 18          |
|                                               |                                  |                                   |                                    |                                    | 4                                  |                                    | 2                                  | 3                                  | 3                                  | 10                                 | 7                                  | 3                                  |                                    |                             | 19          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    |                                    |                                    | 4                                  |                                    | 2                                  | 6                                  | 12                                 | 3                                  |                                    |                                    |                             | 20          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 6                                  | 7                                  | 6                                  |                                    |                                    |                                    |                             | 21          |
|                                               |                                  |                                   |                                    |                                    | 4                                  |                                    |                                    | 3                                  | 8                                  | 6                                  | 1                                  |                                    |                                    |                             | 22          |
|                                               |                                  |                                   |                                    | 4                                  |                                    | 5                                  |                                    | 1                                  | 9                                  | 5                                  |                                    |                                    |                                    |                             | 23          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 2                                  | 16                                 | 12                                 | 6                                  | 4                                  | 8                                  |                                    |                             | 24          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 12                                 | 6                                  | 14                                 | 8                                  | 8                                  |                                    |                             | 25          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  | 12                                 | 8                                  | 13                                 | 5                                  |                                    |                             | 26          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 9                                  | 8                                  | 2                                  |                                    |                             | 27          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 8                                  | 4                                  |                                    |                                    |                                    |                             | 28          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 7                                  | 1                                  |                                    |                                    |                             | 29          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 30          |
|                                               |                                  |                                   |                                    |                                    |                                    | 4                                  |                                    | 4                                  | 22                                 | 12                                 | 16                                 | 2                                  |                                    |                             | 31          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 6                                  | 19                                 | 20                                 | 8                                  | 8                                  |                                    |                             | 32          |
|                                               |                                  |                                   |                                    |                                    | 4                                  |                                    |                                    | 3                                  | 20                                 | 20                                 | 19                                 | 8                                  |                                    |                             | 33          |
|                                               |                                  |                                   |                                    | 4                                  |                                    | 5                                  |                                    | 1                                  | 11                                 | 21                                 | 15                                 | 14                                 | 5                                  |                             | 34          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    |                                    |                                    | 2                                  |                                    | 2                                  | 2                                  |                                    |                                    |                                    |                                    |                             | 35          |
|                                               |                                  |                                   |                                    | 2                                  | 1                                  |                                    |                                    | 2                                  | 1                                  |                                    |                                    |                                    |                                    |                             | 36          |
|                                               |                                  |                                   |                                    | 2                                  |                                    |                                    |                                    | 2                                  | 4                                  |                                    | 1                                  | 1                                  |                                    |                             | 37          |
|                                               |                                  |                                   |                                    | 2                                  |                                    | 5                                  |                                    | 1                                  |                                    |                                    | 2                                  |                                    |                                    |                             | 38          |
|                                               |                                  |                                   |                                    |                                    |                                    | 1                                  |                                    | 1                                  | 4                                  | 1                                  | 5                                  |                                    |                                    |                             | 39          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 1                                  | 2                                  | 2                                  | 5                                  |                                    |                                    |                             | 40          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 1                                  | 4                                  | 2                                  | 5                                  |                                    |                                    |                                    |                             | 41          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  | 4                                  | 6                                  |                                    |                                    |                                    |                             | 42          |

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TABLE L.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—PLATE

| Line No. | Occupation, district, and number of plants.       | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |       |                      |       |                      |       |
|----------|---------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-------|----------------------|-------|----------------------|-------|
|          |                                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60    | Over 60 and under 72 | 72    | Over 72 and under 84 | 84    |
| 1        | Roll hands, other, sheared-plate mills—Concluded. |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 2        | G. L. and M. W.—                                  | 1913  | 2                    | 63.3                              | \$0.490                         | \$30.96                            | .....                                          | .....                | .....           | ..... | 2                    | ..... | .....                | ..... |
| 3        | 1 plant.....                                      | 1914  | 2                    | 63.3                              | .260                            | 16.45                              | .....                                          | .....                | .....           | ..... | 2                    | ..... | .....                | ..... |
|          |                                                   | 1915  | 2                    | 63.3                              | .340                            | 21.47                              | .....                                          | .....                | .....           | ..... | 2                    | ..... | .....                | ..... |
| 4        | Total—                                            | 1913  | 20                   | 69.1                              | .265                            | 18.28                              | .....                                          | .....                | .....           | ..... | 10                   | 10    | .....                | ..... |
| 5        | 7 plants.....                                     | 1914  | 18                   | 68.7                              | .246                            | 17.08                              | .....                                          | .....                | .....           | ..... | 10                   | 8     | .....                | ..... |
| 6        | 9 plants.....                                     | 1914  | 24                   | 67.4                              | .257                            | 17.42                              | .....                                          | .....                | .....           | ..... | 16                   | 8     | .....                | ..... |
| 7        |                                                   | 1915  | 24                   | 67.4                              | .268                            | 18.12                              | .....                                          | .....                | .....           | ..... | 14                   | 10    | .....                | ..... |
|          | Rollers, universal mills, 48-inch:                |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 8        | Eastern—                                          |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 9        | 1 plant.....                                      | 1913  | 2                    | 65.3                              | .261                            | 17.03                              | .....                                          | .....                | .....           | ..... | 2                    | ..... | .....                | ..... |
|          |                                                   | 1914  | 2                    | 65.3                              | .266                            | 17.32                              | .....                                          | .....                | .....           | ..... | 2                    | ..... | .....                | ..... |
| 10       | 2 plants.....                                     | 1914  | 4                    | 65.6                              | .451                            | 29.65                              | .....                                          | .....                | .....           | ..... | 4                    | ..... | .....                | ..... |
| 11       |                                                   | 1915  | 4                    | 65.6                              | .509                            | 33.47                              | .....                                          | .....                | .....           | ..... | 4                    | ..... | .....                | ..... |
| 12       | Pittsburgh—                                       |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 13       | 1 plant.....                                      | 1913  | 2                    | 72.0                              | 1.078                           | 77.62                              | .....                                          | .....                | .....           | ..... | .....                | 2     | .....                | ..... |
| 14       |                                                   | 1914  | 2                    | 72.0                              | .795                            | 57.24                              | .....                                          | .....                | .....           | ..... | .....                | 2     | .....                | ..... |
|          |                                                   | 1915  | 2                    | 72.0                              | .992                            | 71.39                              | .....                                          | .....                | .....           | ..... | .....                | 2     | .....                | ..... |
| 15       | G. L. and M. W.—                                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 16       | 2 plants.....                                     | 1913  | 2                    | 72.0                              | .678                            | 48.78                              | .....                                          | .....                | .....           | ..... | .....                | 2     | .....                | ..... |
| 17       |                                                   | 1914  | 2                    | 72.0                              | .664                            | 47.77                              | .....                                          | .....                | .....           | ..... | .....                | 2     | .....                | ..... |
|          |                                                   | 1915  | 2                    | 72.0                              | .696                            | 50.08                              | .....                                          | .....                | .....           | ..... | .....                | 2     | .....                | ..... |
| 18       | Total—                                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 19       | 4 plants.....                                     | 1913  | 6                    | 69.8                              | .672                            | 47.81                              | .....                                          | .....                | .....           | ..... | 2                    | 4     | .....                | ..... |
|          |                                                   | 1914  | 6                    | 69.8                              | .575                            | 40.78                              | .....                                          | .....                | .....           | ..... | 2                    | 4     | .....                | ..... |
| 20       | 5 plants.....                                     | 1914  | 8                    | 68.8                              | .590                            | 41.08                              | .....                                          | .....                | .....           | ..... | 4                    | 4     | .....                | ..... |
| 21       |                                                   | 1915  | 8                    | 68.8                              | .676                            | 47.10                              | .....                                          | .....                | .....           | ..... | 4                    | 4     | .....                | ..... |
|          | Screw men, main rolls, universal mills:           |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 22       | Eastern—                                          |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 23       | 1 plant.....                                      | 1913  | 2                    | 65.3                              | .227                            | 14.81                              | .....                                          | .....                | .....           | ..... | 2                    | ..... | .....                | ..... |
|          |                                                   | 1914  | 2                    | 65.3                              | .226                            | 14.75                              | .....                                          | .....                | .....           | ..... | 2                    | ..... | .....                | ..... |
| 24       | 2 plants.....                                     | 1914  | 4                    | 65.6                              | .296                            | 19.47                              | .....                                          | .....                | .....           | ..... | 4                    | ..... | .....                | ..... |
| 25       |                                                   | 1915  | 4                    | 65.6                              | .336                            | 22.09                              | .....                                          | .....                | .....           | ..... | 4                    | ..... | .....                | ..... |
| 26       | Pittsburgh—                                       |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 27       | 1 plant.....                                      | 1913  | 2                    | 72.0                              | .704                            | 50.69                              | .....                                          | .....                | .....           | ..... | .....                | 2     | .....                | ..... |
| 28       |                                                   | 1914  | 2                    | 72.0                              | .525                            | 37.76                              | .....                                          | .....                | .....           | ..... | .....                | 2     | .....                | ..... |
|          |                                                   | 1915  | 2                    | 72.0                              | .665                            | 47.84                              | .....                                          | .....                | .....           | ..... | .....                | 2     | .....                | ..... |
| 29       | G. L. and M. W.—                                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 30       | 2 plants.....                                     | 1913  | 3                    | 72.0                              | .452                            | 32.54                              | .....                                          | .....                | .....           | ..... | .....                | 3     | .....                | ..... |
| 31       |                                                   | 1914  | 3                    | 72.0                              | .413                            | 29.76                              | .....                                          | .....                | .....           | ..... | .....                | 3     | .....                | ..... |
|          |                                                   | 1915  | 3                    | 72.0                              | .461                            | 33.19                              | .....                                          | .....                | .....           | ..... | .....                | 3     | .....                | ..... |
| 32       | Total—                                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 33       | 4 plants.....                                     | 1913  | 7                    | 70.1                              | .460                            | 32.66                              | .....                                          | .....                | .....           | ..... | 2                    | 5     | .....                | ..... |
|          |                                                   | 1914  | 7                    | 70.1                              | .392                            | 27.76                              | .....                                          | .....                | .....           | ..... | 2                    | 5     | .....                | ..... |
| 34       | 5 plants.....                                     | 1914  | 9                    | 69.2                              | .386                            | 26.96                              | .....                                          | .....                | .....           | ..... | 4                    | 5     | .....                | ..... |
| 35       |                                                   | 1915  | 9                    | 69.2                              | .451                            | 31.51                              | .....                                          | .....                | .....           | ..... | 4                    | 5     | .....                | ..... |
|          | Screw men, side rolls, universal mills:           |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 36       | Eastern—                                          |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 37       | 1 plant.....                                      | 1913  | 2                    | 65.3                              | .181                            | 11.81                              | .....                                          | .....                | .....           | ..... | 2                    | ..... | .....                | ..... |
|          |                                                   | 1914  | 4                    | 65.3                              | .179                            | 11.68                              | .....                                          | .....                | .....           | ..... | 4                    | ..... | .....                | ..... |
| 38       | 2 plants.....                                     | 1914  | 6                    | 65.5                              | .222                            | 14.57                              | .....                                          | .....                | .....           | ..... | 6                    | ..... | .....                | ..... |
| 39       |                                                   | 1915  | 6                    | 65.5                              | .280                            | 18.35                              | .....                                          | .....                | .....           | ..... | 6                    | ..... | .....                | ..... |
| 40       | Pittsburgh—                                       |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 41       | 1 plant.....                                      | 1913  | 2                    | 72.0                              | .497                            | 35.75                              | .....                                          | .....                | .....           | ..... | .....                | 2     | .....                | ..... |
| 42       |                                                   | 1914  | 2                    | 72.0                              | .370                            | 26.64                              | .....                                          | .....                | .....           | ..... | .....                | 2     | .....                | ..... |
|          |                                                   | 1915  | 2                    | 72.0                              | .469                            | 33.73                              | .....                                          | .....                | .....           | ..... | .....                | 2     | .....                | ..... |
| 43       | G. L. and M. W.—                                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 44       | 2 plants.....                                     | 1913  | 2                    | 72.0                              | .318                            | 22.86                              | .....                                          | .....                | .....           | ..... | .....                | 2     | .....                | ..... |
| 45       |                                                   | 1914  | 2                    | 72.0                              | .321                            | 23.08                              | .....                                          | .....                | .....           | ..... | .....                | 2     | .....                | ..... |
|          |                                                   | 1915  | 2                    | 72.0                              | .353                            | 25.38                              | .....                                          | .....                | .....           | ..... | .....                | 2     | .....                | ..... |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
MILLS—Continued.

| Employees whose rates of wages per hour were— |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | Line<br>No. |
|-----------------------------------------------|----------------------------------|-----------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|-----------------------------|-------------|
| 7<br>and<br>under<br>8<br>cents.              | 8<br>and<br>under<br>9<br>cents. | 9<br>and<br>under<br>10<br>cents. | 10<br>and<br>under<br>12<br>cents. | 12<br>and<br>under<br>14<br>cents. | 14<br>and<br>under<br>16<br>cents. | 16<br>and<br>under<br>18<br>cents. | 18<br>and<br>under<br>20<br>cents. | 20<br>and<br>under<br>25<br>cents. | 25<br>and<br>under<br>30<br>cents. | 30<br>and<br>under<br>40<br>cents. | 40<br>and<br>under<br>50<br>cents. | 50<br>and<br>under<br>60<br>cents. | 60<br>and<br>under<br>70<br>cents. | 70<br>cents<br>and<br>over. |             |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 2                                  | 2                                  |                                    |                                    |                             | 1           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 2           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                                    |                             | 3           |
|                                               |                                  |                                   |                                    |                                    |                                    | 3                                  | 3                                  | 6                                  | 1                                  | 5                                  | 2                                  |                                    |                                    |                             | 4           |
|                                               |                                  |                                   |                                    | 2                                  | 1                                  |                                    | 3                                  | 3                                  | 4                                  | 5                                  |                                    |                                    |                                    |                             | 5           |
|                                               |                                  |                                   |                                    | 2                                  |                                    |                                    | 3                                  | 8                                  |                                    | 6                                  | 1                                  |                                    |                                    |                             | 6           |
|                                               |                                  |                                   |                                    | 2                                  |                                    | 5                                  | 1                                  | 2                                  | 4                                  | 8                                  | 2                                  |                                    |                                    |                             | 7           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                                    |                                    |                             | 8           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                                    |                                    |                             | 9           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    | 2                                  |                             | 10          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                             | 11          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                           | 12          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                           | 13          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                           | 14          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                             | 15          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                             | 16          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 1                           | 17          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                                    | 2                                  | 2                           | 18          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                                    | 2                                  | 2                           | 19          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                                    | 4                                  | 2                           | 20          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    | 3                                  | 3                           | 21          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                                    |                                    |                                    |                             | 22          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                                    |                                    |                                    |                             | 23          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                                    |                                    |                                    |                             | 24          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 2                                  |                                    |                                    |                                    |                             | 25          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 1                           | 26          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                             | 27          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 28          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 3                                  |                                    |                                    |                             | 29          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 2                                  |                                    |                                    |                             | 30          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 3                                  |                                    |                                    |                             | 31          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    | 3                                  |                                    | 1                                  | 1                           | 32          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    | 1                                  | 2                                  |                                    |                                    |                             | 33          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    | 3                                  | 2                                  | 2                                  |                                    |                             | 34          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 2                                  | 3                                  |                                    | 2                                  |                             | 35          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                                    |                                    |                                    |                                    |                             | 36          |
|                                               |                                  |                                   |                                    |                                    |                                    | 2                                  | 2                                  |                                    |                                    |                                    |                                    |                                    |                                    |                             | 37          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    | 2                                  |                                    |                                    |                                    |                             | 38          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  | 2                                  |                                    |                                    |                                    |                                    |                             | 39          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 1                                  |                             | 40          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                             | 41          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                             | 42          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                             | 43          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                             | 44          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                             | 45          |

TABLE L.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, 1913 TO 1915—PLATE

| Line No. | Occupation, district, and number of plants.           | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |     |                      |
|----------|-------------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|-----|----------------------|
|          |                                                       |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72  | Over 72 and under 84 |
|          | Screw men, side rolls, universal mills—<br>Concluded. |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 1        | Total—                                                |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 2        | 4 plants.....                                         | 1913  | 6                    | 69.8                              | \$0.332                         | \$23.47                            |                                                |                      |                 |    | 2                    | 4   |                      |
|          |                                                       | 1914  | 8                    | 68.6                              | .262                            | 18.27                              |                                                |                      |                 |    | 4                    | 4   |                      |
| 3        | 5 plants.....                                         | 1914  | 10                   | 68.1                              | .271                            | 18.69                              |                                                |                      |                 |    | 6                    | 4   |                      |
| 4        |                                                       | 1915  | 10                   | 68.1                              | .332                            | 22.83                              |                                                |                      |                 |    | 0                    | 4   |                      |
|          | Roll hands, other, universal mills:                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 5        | Eastern—                                              |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 6        | 1 plant.....                                          | 1913  | 2                    | 65.3                              | .181                            | 11.81                              |                                                |                      |                 |    | 2                    |     |                      |
|          |                                                       | 1914  | 2                    | 65.3                              | .179                            | 11.68                              |                                                |                      |                 |    | 2                    |     |                      |
| 7        | 2 plants.....                                         | 1914  | 4                    | 65.6                              | .273                            | 17.93                              |                                                |                      |                 |    | 4                    |     |                      |
| 8        |                                                       | 1915  | 4                    | 65.6                              | .308                            | 20.24                              |                                                |                      |                 |    | 4                    |     |                      |
| 9        | Pittsburgh—                                           |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 10       | 1 plant.....                                          | 1913  | 2                    | 72.0                              | .365                            | 26.28                              |                                                |                      |                 |    |                      | 2   |                      |
|          |                                                       | 1914  | 2                    | 72.0                              | .273                            | 19.66                              |                                                |                      |                 |    |                      | 2   |                      |
| 11       |                                                       | 1915  | 2                    | 72.0                              | .339                            | 24.41                              |                                                |                      |                 |    |                      | 2   |                      |
| 12       | G. L. and M. W.—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 13       | 2 plants.....                                         | 1913  | 4                    | 72.0                              | .250                            | 17.96                              |                                                |                      |                 |    |                      | 4   |                      |
|          |                                                       | 1914  | 4                    | 72.0                              | .256                            | 18.45                              |                                                |                      |                 |    |                      | 4   |                      |
| 14       |                                                       | 1915  | 3                    | 72.0                              | .293                            | 21.12                              |                                                |                      |                 |    |                      | 3   |                      |
| 15       | Total—                                                |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 16       | 4 plants.....                                         | 1913  | 8                    | 70.3                              | .261                            | 18.50                              |                                                |                      |                 |    | 2                    | 6   |                      |
|          |                                                       | 1914  | 8                    | 70.3                              | .241                            | 17.06                              |                                                |                      |                 |    | 2                    | 6   |                      |
| 17       | 5 plants.....                                         | 1914  | 10                   | 69.5                              | .266                            | 18.48                              |                                                |                      |                 |    | 4                    | 6   |                      |
| 18       |                                                       | 1915  | 9                    | 69.2                              | .310                            | 21.46                              |                                                |                      |                 |    | 4                    | 5   |                      |
|          | Shearmen:                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 19       | Eastern—                                              |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 20       | 2 plants.....                                         | 1913  | 16                   | 66.2                              | .298                            | 19.71                              |                                                |                      |                 |    | 15                   | 1   |                      |
|          |                                                       | 1914  | 16                   | 66.2                              | .267                            | 17.66                              |                                                |                      |                 |    | 15                   | 1   |                      |
| 21       | 3 plants.....                                         | 1914  | 20                   | 65.6                              | .309                            | 20.22                              |                                                |                      |                 |    | 19                   | 1   |                      |
| 22       |                                                       | 1915  | 20                   | 65.6                              | .307                            | 20.12                              |                                                |                      |                 | 1  | 18                   | 1   |                      |
| 23       | Pittsburgh—                                           |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 24       | 5 plants.....                                         | 1913  | 35                   | 70.9                              | .491                            | 34.79                              |                                                |                      | 1               |    | 4                    | 30  |                      |
|          |                                                       | 1914  | 30                   | 70.3                              | .534                            | 37.43                              |                                                | 1                    |                 |    | 6                    | 23  |                      |
| 25       | 6 plants.....                                         | 1914  | 35                   | 70.5                              | .515                            | 36.21                              |                                                |                      | 1               |    | 6                    | 28  |                      |
| 26       |                                                       | 1915  | 35                   | 70.1                              | .555                            | 38.44                              |                                                |                      | 1               | 1  | 6                    | 27  |                      |
| 27       | G. L. and M. W.—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 28       | 4 plants.....                                         | 1913  | 18                   | 67.2                              | .371                            | 25.25                              |                                                |                      |                 |    | 8                    | 10  |                      |
|          |                                                       | 1914  | 18                   | 67.2                              | .303                            | 20.55                              |                                                |                      |                 |    | 8                    | 10  |                      |
| 29       |                                                       | 1915  | 18                   | 67.2                              | .347                            | 23.26                              |                                                |                      |                 |    | 8                    | 10  |                      |
| 30       | Total—                                                |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 31       | 11 plants.....                                        | 1913  | 69                   | 68.8                              | .415                            | 28.81                              |                                                |                      | 1               |    | 27                   | 41  |                      |
|          |                                                       | 1914  | 64                   | 68.4                              | .402                            | 27.74                              |                                                |                      | 1               |    | 29                   | 34  |                      |
| 32       | 13 plants.....                                        | 1914  | 73                   | 68.4                              | .406                            | 27.97                              |                                                |                      | 1               |    | 33                   | 39  |                      |
| 33       |                                                       | 1915  | 73                   | 68.2                              | .436                            | 29.68                              |                                                |                      | 1               | 2  | 32                   | 38  |                      |
|          | Shearmen's helpers:                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 34       | Eastern—                                              |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 35       | 2 plants.....                                         | 1913  | 81                   | 65.7                              | .200                            | 13.16                              |                                                |                      |                 |    | 81                   |     |                      |
|          |                                                       | 1914  | 76                   | 65.7                              | .183                            | 12.00                              |                                                |                      |                 |    | 76                   |     |                      |
| 36       | 3 plants.....                                         | 1914  | 91                   | 65.1                              | .197                            | 12.86                              |                                                |                      |                 |    | 91                   |     |                      |
| 37       |                                                       | 1915  | 99                   | 65.0                              | .189                            | 12.33                              |                                                |                      |                 | 6  | 93                   |     |                      |
| 38       | Pittsburgh—                                           |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 39       | 5 plants.....                                         | 1913  | 219                  | 70.7                              | .276                            | 19.60                              |                                                |                      | 2               |    | 41                   | 176 |                      |
|          |                                                       | 1914  | 196                  | 70.3                              | .277                            | 19.59                              |                                                |                      | 2               |    | 48                   | 146 |                      |
| 40       | 6 plants.....                                         | 1914  | 216                  | 70.5                              | .277                            | 19.60                              |                                                |                      | 2               |    | 48                   | 166 |                      |
| 41       |                                                       | 1915  | 214                  | 70.6                              | .297                            | 21.04                              |                                                |                      | 2               |    | 48                   | 154 | 10                   |



AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
MILLS—Continued.

| Employees whose rates of wages per hour were-- |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | Line<br>No. |
|------------------------------------------------|----------------------------------|-----------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|-----------------------------|-------------|
| 7<br>and<br>under<br>8<br>cents.               | 8<br>and<br>under<br>9<br>cents. | 9<br>and<br>under<br>10<br>cents. | 10<br>and<br>under<br>12<br>cents. | 12<br>and<br>under<br>14<br>cents. | 14<br>and<br>under<br>16<br>cents. | 16<br>and<br>under<br>18<br>cents. | 18<br>and<br>under<br>20<br>cents. | 20<br>and<br>under<br>25<br>cents. | 25<br>and<br>under<br>30<br>cents. | 30<br>and<br>under<br>40<br>cents. | 40<br>and<br>under<br>50<br>cents. | 50<br>and<br>under<br>60<br>cents. | 60<br>and<br>under<br>70<br>cents. | 70<br>cents<br>and<br>over. |             |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    | 2                                  | 1                                  | 1                                  |                                    |                             | 1           |
|                                                |                                  |                                   |                                    |                                    |                                    | 2                                  | 2                                  |                                    |                                    | 4                                  |                                    |                                    |                                    |                             | 2           |
|                                                |                                  |                                   |                                    |                                    |                                    | 2                                  | 2                                  |                                    |                                    | 6                                  |                                    |                                    |                                    |                             | 3           |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  | 2                                  | 4                                  | 2                                  |                                    |                                    |                             | 4           |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                                |                                  |                                   |                                    |                                    |                                    | 1                                  | 1                                  |                                    |                                    |                                    |                                    |                                    |                                    |                             | 5           |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 6           |
|                                                |                                  |                                   |                                    |                                    |                                    | 1                                  | 1                                  |                                    |                                    | 2                                  |                                    |                                    |                                    |                             | 7           |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    | 2                                  |                                    |                                    |                                    |                             | 8           |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                                    |                             | 9           |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                                    |                             | 10          |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                             | 11          |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 3                                  |                                    |                                    |                                    |                                    |                                    |                             | 12          |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 4                                  | 1                                  |                                    |                                    |                                    |                                    |                             | 13          |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 1                                  | 2                                  |                                    |                                    |                                    |                                    |                             | 14          |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    | 2                                  | 3                                  | 1                                  | 2                                  |                                    |                                    |                                    |                             | 15          |
|                                                |                                  |                                   |                                    |                                    |                                    | 1                                  | 1                                  | 6                                  |                                    |                                    |                                    |                                    |                                    |                             | 16          |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 6                                  | 2                                  |                                    |                                    |                                    |                             | 17          |
|                                                |                                  |                                   |                                    |                                    |                                    | 1                                  | 1                                  | 2                                  | 1                                  | 6                                  |                                    |                                    |                                    |                             | 18          |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    | 2                                  | 5                                  | 2                                  | 3                                  | 4                                  |                                    |                                    |                             | 19          |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    | 2                                  | 6                                  | 3                                  | 5                                  |                                    |                                    |                                    |                             | 20          |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    | 1                                  | 7                                  | 3                                  | 7                                  |                                    | 1                                  | 1                                  |                             | 21          |
|                                                |                                  |                                   |                                    |                                    |                                    | 2                                  |                                    | 4                                  | 6                                  | 3                                  | 5                                  |                                    |                                    |                             | 22          |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 9                                  | 6                                  | 10                                 | 7                                  | 2                           | 23          |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 8                                  | 3                                  | 8                                  | 8                                  | 3                           | 24          |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 10                                 | 6                                  | 8                                  | 8                                  | 3                           | 25          |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 9                                  | 13                                 | 4                                  | 5                           | 26          |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                                    |                                    |                             |             |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 3                                  | 9                                  | 7                                  |                                    |                                    |                             | 27          |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    | 6                                  | 8                                  | 1                                  |                                    |                                    |                             | 28          |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    |                                    | 1                                  | 1                                  | 11                                 | 4                                  | 1                                  |                                    |                             | 29          |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    | 2                                  | 5                                  | 5                                  | 21                                 | 17                                 | 10                                 | 7                                  | 2                           | 30          |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    | 2                                  | 9                                  | 9                                  | 21                                 | 4                                  | 8                                  | 8                                  | 3                           | 31          |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    | 1                                  | 10                                 | 9                                  | 25                                 | 7                                  | 9                                  | 9                                  | 3                           | 32          |
|                                                |                                  |                                   |                                    |                                    |                                    | 2                                  |                                    | 5                                  | 7                                  | 18                                 | 18                                 | 14                                 | 4                                  | 5                           | 33          |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                                |                                  |                                   |                                    | 10                                 | 15                                 | 21                                 | 1                                  | 12                                 | 18                                 | 4                                  |                                    |                                    |                                    |                             | 34          |
|                                                |                                  |                                   | 7                                  | 15                                 | 9                                  | 11                                 | 2                                  | 19                                 | 13                                 |                                    |                                    |                                    |                                    |                             | 35          |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                                |                                  |                                   |                                    | 10                                 | 8                                  | 11                                 | 9                                  | 27                                 | 17                                 | 2                                  |                                    |                                    |                                    |                             | 36          |
|                                                |                                  |                                   |                                    | 16                                 | 22                                 | 8                                  | 11                                 | 30                                 | 30                                 | 2                                  |                                    |                                    |                                    |                             | 37          |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                                |                                  |                                   |                                    |                                    |                                    | 8                                  | 34                                 | 65                                 | 15                                 | 85                                 | 12                                 |                                    |                                    |                             | 38          |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    | 18                                 | 63                                 | 42                                 | 61                                 | 12                                 |                                    |                                    |                             | 39          |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    | 18                                 | 70                                 | 50                                 | 66                                 | 12                                 |                                    |                                    |                             | 40          |
|                                                |                                  |                                   |                                    |                                    |                                    |                                    | 18                                 | 58                                 | 28                                 | 97                                 | 13                                 |                                    |                                    |                             | 41          |

TABLE L.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, 1913 TO 1915—PLATE

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |     |                      |    |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|-----|----------------------|----|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72  | Over 72 and under 84 | 84 |
| 1        | Shearmen's helpers—                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |
| 2        | Concluded.                                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |
| 3        | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |
|          | 4 plants.....                               | 1913  | 125                  | 67.0                              | \$0.236                         | \$15.77                            |                                                |                      |                 |    | 58                   | 67  |                      |    |
|          |                                             | 1914  | 101                  | 66.0                              | .211                            | 13.99                              |                                                |                      |                 |    | 56                   | 45  |                      |    |
|          |                                             | 1915  | 93                   | 66.9                              | .230                            | 16.56                              |                                                |                      |                 |    | 44                   | 49  |                      |    |
| 4        | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |
|          | 11 plants.....                              | 1913  | 425                  | 68.7                              | .250                            | 17.25                              |                                                |                      | 2               |    | 180                  | 243 |                      |    |
|          |                                             | 1914  | 373                  | 68.2                              | .240                            | 16.53                              |                                                |                      | 2               |    | 180                  | 191 |                      |    |
| 5        |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |
| 6        | 13 plants.....                              | 1914  | 408                  | 68.2                              | .243                            | 16.71                              |                                                |                      | 2               |    | 195                  | 211 |                      |    |
| 7        |                                             | 1915  | 406                  | 68.4                              | .260                            | 17.89                              |                                                |                      | 2               | 6  | 185                  | 203 | 10                   |    |
| 8        | Laborers:                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |
| 9        | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |
|          | 2 plants.....                               | 1913  | 94                   | 62.9                              | .151                            | 9.49                               |                                                |                      |                 | 75 | 8                    | 4   |                      | 7  |
|          |                                             | 1914  | 76                   | 62.2                              | .150                            | 9.30                               |                                                | 7                    |                 | 41 | 24                   | 1   |                      | 3  |
| 10       |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |
| 11       | 3 plants.....                               | 1914  | 84                   | 61.6                              | .151                            | 9.28                               |                                                | 14                   |                 | 41 | 25                   | 1   |                      | 3  |
|          |                                             | 1915  | 85                   | 61.3                              | .151                            | 9.28                               |                                                | 20                   |                 | 35 | 26                   | 1   |                      | 3  |
| 12       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |
| 13       | 4 plants.....                               | 1913  | 118                  | 72.8                              | .191                            | 13.96                              |                                                |                      |                 | 1  | 45                   | 51  | 9                    | 12 |
|          |                                             | 1914  | 98                   | 71.8                              | .191                            | 13.71                              |                                                |                      |                 | 3  | 32                   | 34  | 27                   | 2  |
| 14       |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |
| 15       | 5 plants.....                               | 1914  | 116                  | 71.5                              | .188                            | 13.48                              |                                                |                      |                 | 3  | 38                   | 46  | 27                   | 2  |
|          |                                             | 1915  | 108                  | 71.1                              | .189                            | 13.46                              |                                                |                      | 8               | 3  | 32                   | 31  | 28                   | 3  |
| 16       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |
| 17       | 4 plants.....                               | 1913  | 16                   | 69.8                              | .195                            | 13.62                              |                                                |                      |                 | 1  | 14                   | 1   |                      | 1  |
|          |                                             | 1914  | 16                   | 71.3                              | .190                            | 13.53                              |                                                |                      |                 | 1  | 2                    | 12  |                      | 1  |
| 18       |                                             | 1915  | 15                   | 65.1                              | .189                            | 12.27                              |                                                |                      | 7               | 1  | 2                    | 4   |                      | 1  |
| 19       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |
| 20       | 10 plants.....                              | 1913  | 228                  | 68.5                              | .175                            | 12.09                              |                                                |                      |                 | 77 | 67                   | 56  | 9                    | 19 |
|          |                                             | 1914  | 190                  | 67.9                              | .174                            | 11.93                              |                                                | 7                    |                 | 45 | 58                   | 47  | 27                   | 6  |
| 21       |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |
| 22       | 12 plants.....                              | 1914  | 216                  | 67.6                              | .174                            | 11.85                              |                                                | 14                   |                 | 45 | 65                   | 59  | 27                   | 6  |
|          |                                             | 1915  | 208                  | 66.7                              | .174                            | 11.66                              |                                                | 20                   | 15              | 39 | 60                   | 39  | 28                   | 7  |
| 23       | Unclassified—productive:                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |
| 24       | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |
|          | 3 plants.....                               | 1914  | 172                  | 65.5                              | .192                            | 12.57                              |                                                |                      |                 |    | 172                  |     |                      |    |
|          |                                             | 1915  | 167                  | 65.2                              | .191                            | 12.46                              |                                                |                      |                 |    | 167                  |     |                      |    |
| 25       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |
| 26       | 6 plants.....                               | 1914  | 316                  | 71.0                              | .249                            | 17.69                              |                                                |                      |                 | 5  | 79                   | 193 | 27                   | 12 |
|          |                                             | 1915  | 319                  | 70.8                              | .260                            | 18.41                              |                                                |                      | 2               | 7  | 82                   | 188 | 28                   | 12 |
| 27       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |
| 28       | 4 plants.....                               | 1914  | 77                   | 69.5                              | .231                            | 16.09                              |                                                |                      | 1               | 1  | 16                   | 59  |                      |    |
|          |                                             | 1915  | 66                   | 70.8                              | .241                            | 17.05                              |                                                |                      |                 | 2  | 6                    | 56  | 2                    |    |
| 29       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |
| 30       | 13 plants.....                              | 1914  | 565                  | 69.1                              | .229                            | 15.91                              |                                                |                      | 1               | 6  | 267                  | 252 | 27                   | 12 |
|          |                                             | 1915  | 552                  | 69.1                              | .237                            | 16.45                              |                                                |                      | 2               | 9  | 255                  | 244 | 30                   | 12 |
| 31       | Unclassified—nonproductive:                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |
| 32       | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |
|          | 3 plants.....                               | 1914  | 157                  | 71.1                              | .182                            | 12.84                              |                                                |                      |                 | 33 | 38                   | 39  | 10                   | 37 |
|          |                                             | 1915  | 142                  | 72.0                              | .186                            | 13.28                              |                                                |                      |                 | 28 | 28                   | 39  | 9                    | 38 |
| 33       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |
| 34       | 5 plants.....                               | 1914  | 238                  | 70.7                              | .232                            | 16.36                              |                                                | 1                    | 17              | 11 | 86                   | 69  | 21                   | 33 |
|          |                                             | 1915  | 226                  | 69.5                              | .240                            | 16.71                              |                                                | 1                    | 33              | 18 | 63                   | 69  | 11                   | 31 |
| 35       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |
| 36       | 4 plants.....                               | 1914  | 156                  | 68.7                              | .237                            | 16.12                              |                                                |                      |                 | 27 | 40                   | 74  | 10                   | 5  |
|          |                                             | 1915  | 153                  | 68.2                              | .253                            | 17.03                              |                                                | 16                   | 13              |    | 24                   | 85  | 12                   | 3  |
| 37       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |
| 38       | 12 plants.....                              | 1914  | 551                  | 70.3                              | .219                            | 15.29                              |                                                | 1                    | 44              | 44 | 164                  | 182 | 41                   | 75 |
|          |                                             | 1915  | 521                  | 69.8                              | .229                            | 15.87                              |                                                | 17                   | 46              | 46 | 115                  | 193 | 32                   | 72 |

<sup>1</sup> Including 10 employees whose hours per week were 91.

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
MILLS—Concluded.

| Employees whose rates of wages per hour were— |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | Line<br>No. |
|-----------------------------------------------|----------------------------------|-----------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|-----------------------------|-------------|
| 7<br>and<br>under<br>8<br>cents.              | 8<br>and<br>under<br>9<br>cents. | 9<br>and<br>under<br>10<br>cents. | 10<br>and<br>under<br>12<br>cents. | 12<br>and<br>under<br>14<br>cents. | 14<br>and<br>under<br>16<br>cents. | 16<br>and<br>under<br>18<br>cents. | 18<br>and<br>under<br>20<br>cents. | 20<br>and<br>under<br>25<br>cents. | 25<br>and<br>under<br>30<br>cents. | 30<br>and<br>under<br>40<br>cents. | 40<br>and<br>under<br>50<br>cents. | 50<br>and<br>under<br>60<br>cents. | 60<br>and<br>under<br>70<br>cents. | 70<br>cents<br>and<br>over. |             |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 10                                 | 107                                | 2                                  |                                    | 6                                  |                                    |                                    |                             | 1           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 10                                 | 83                                 | 2                                  | 6                                  |                                    |                                    |                                    |                             | 2           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    | 10                                 | 29                                 | 43                                 | 11                                 |                                    |                                    |                                    |                             | 3           |
|                                               |                                  |                                   |                                    | 10                                 | 15                                 | 29                                 | 45                                 | 184                                | 35                                 | 89                                 | 18                                 |                                    |                                    |                             | 4           |
|                                               |                                  |                                   | 7                                  | 15                                 | 9                                  | 11                                 | 30                                 | 165                                | 57                                 | 67                                 | 12                                 |                                    |                                    |                             | 5           |
|                                               |                                  |                                   | 7                                  | 10                                 | 8                                  | 11                                 | 37                                 | 180                                | 69                                 | 74                                 | 12                                 |                                    |                                    |                             | 6           |
|                                               |                                  |                                   | 10                                 | 16                                 | 22                                 | 8                                  | 39                                 | 87                                 | 101                                | 110                                | 13                                 |                                    |                                    |                             | 7           |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   |                                    |                                    | 84                                 | 10                                 |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 8           |
|                                               |                                  |                                   |                                    | 5                                  | 67                                 | 4                                  |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 9           |
|                                               |                                  |                                   |                                    | 5                                  | 66                                 | 13                                 |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 10          |
|                                               |                                  |                                   |                                    | 5                                  | 65                                 | 15                                 |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 11          |
|                                               |                                  |                                   |                                    |                                    |                                    | 30                                 | 44                                 | 44                                 |                                    |                                    |                                    |                                    |                                    |                             | 12          |
|                                               |                                  |                                   |                                    |                                    |                                    | 33                                 | 24                                 | 41                                 |                                    |                                    |                                    |                                    |                                    |                             | 13          |
|                                               |                                  |                                   |                                    |                                    |                                    | 51                                 | 24                                 | 41                                 |                                    |                                    |                                    |                                    |                                    |                             | 14          |
|                                               |                                  |                                   |                                    |                                    |                                    | 41                                 | 28                                 | 39                                 |                                    |                                    |                                    |                                    |                                    |                             | 15          |
|                                               |                                  |                                   |                                    |                                    |                                    | 1                                  | 12                                 | 3                                  |                                    |                                    |                                    |                                    |                                    |                             | 16          |
|                                               |                                  |                                   |                                    |                                    |                                    | 3                                  | 10                                 | 3                                  |                                    |                                    |                                    |                                    |                                    |                             | 17          |
|                                               |                                  |                                   |                                    |                                    |                                    | 5                                  | 7                                  | 3                                  |                                    |                                    |                                    |                                    |                                    |                             | 18          |
|                                               |                                  |                                   |                                    |                                    | 84                                 | 41                                 | 56                                 | 47                                 |                                    |                                    |                                    |                                    |                                    |                             | 19          |
|                                               |                                  |                                   |                                    | 5                                  | 67                                 | 40                                 | 34                                 | 44                                 |                                    |                                    |                                    |                                    |                                    |                             | 20          |
|                                               |                                  |                                   |                                    | 5                                  | 66                                 | 67                                 | 34                                 | 44                                 |                                    |                                    |                                    |                                    |                                    |                             | 21          |
|                                               |                                  |                                   |                                    | 5                                  | 65                                 | 61                                 | 35                                 | 42                                 |                                    |                                    |                                    |                                    |                                    |                             | 22          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               | 1                                |                                   | 6                                  | 19                                 | 29                                 | 34                                 | 27                                 | 29                                 | 16                                 | 8                                  | 2                                  | 1                                  |                                    |                             | 23          |
| 2                                             | 1                                | 1                                 | 8                                  | 11                                 | 32                                 | 43                                 | 22                                 | 19                                 | 15                                 | 11                                 | 2                                  |                                    |                                    |                             | 24          |
|                                               |                                  |                                   | 7                                  | 3                                  | 10                                 | 44                                 | 44                                 | 132                                | 56                                 | 45                                 | 16                                 | 3                                  |                                    |                             | 25          |
|                                               |                                  |                                   | 6                                  | 2                                  | 12                                 | 38                                 | 38                                 | 133                                | 36                                 | 68                                 | 17                                 | 7                                  |                                    |                             | 26          |
|                                               |                                  |                                   |                                    | 6                                  |                                    | 11                                 | 45                                 | 8                                  | 5                                  | 2                                  |                                    |                                    |                                    |                             | 27          |
|                                               |                                  |                                   |                                    | 4                                  |                                    | 9                                  | 32                                 | 11                                 |                                    | 1                                  |                                    |                                    |                                    |                             | 28          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               | 1                                |                                   | 6                                  | 26                                 | 38                                 | 44                                 | 82                                 | 206                                | 80                                 | 58                                 | 20                                 | 4                                  |                                    |                             | 29          |
| 2                                             | 1                                | 1                                 | 8                                  | 17                                 | 38                                 | 55                                 | 69                                 | 184                                | 62                                 | 88                                 | 20                                 | 7                                  |                                    |                             | 30          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   | 4                                  | 32                                 | 71                                 | 19                                 | 20                                 | 7                                  | 4                                  |                                    |                                    |                                    |                                    |                             | 31          |
|                                               |                                  |                                   | 2                                  | 3                                  | 64                                 | 27                                 | 24                                 | 8                                  | 3                                  |                                    |                                    |                                    |                                    |                             | 32          |
|                                               |                                  |                                   |                                    |                                    | 16                                 | 24                                 | 128                                | 34                                 | 35                                 | 1                                  |                                    |                                    |                                    |                             | 33          |
|                                               |                                  |                                   |                                    |                                    | 10                                 | 22                                 | 115                                | 29                                 | 49                                 | 1                                  |                                    |                                    |                                    |                             | 34          |
|                                               |                                  |                                   |                                    |                                    |                                    | 28                                 | 80                                 | 23                                 | 25                                 |                                    |                                    |                                    |                                    |                             | 35          |
|                                               |                                  |                                   |                                    |                                    |                                    | 23                                 | 59                                 | 34                                 | 30                                 | 7                                  |                                    |                                    |                                    |                             | 36          |
|                                               |                                  |                                   |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                  |                                   | 4                                  | 32                                 | 87                                 | 71                                 | 228                                | 64                                 | 64                                 | 1                                  |                                    |                                    |                                    |                             | 37          |
|                                               |                                  |                                   | 2                                  | 3                                  | 74                                 | 72                                 | 198                                | 71                                 | 82                                 | 8                                  |                                    |                                    |                                    |                             | 38          |

## STANDARD RAIL MILLS.<sup>1</sup>

### SUMMARY.

In 1915 the average rate of wages or earnings per hour of employees in standard rail mills was 9 per cent higher than in the years 1910 and 1911, 8 per cent higher than in 1912, 3 per cent lower than in 1913, and 2 per cent lower than in 1914. The average full-time hours per week in 1915 were 4 per cent lower than in 1910, 1 per cent higher than in 1911 and 1914, and the same as in 1912 and 1913. The average full-time weekly earnings in 1915 were 6 per cent higher than in 1910, 10 per cent higher than in 1911, 9 per cent higher than in 1912, 3 per cent lower than in 1913, and 2 per cent lower than in 1914. These facts are drawn from the table of relative numbers, for all occupations combined (Table 32).

The most significant details concerning the several standard-rail-mill occupations which are covered in this section of the report are summarized by means of averages and percentages in the table following. Data are presented for the years 1910 to 1915 inclusive, figures for identical plants being grouped together. The data for 1915 represents 1,945 employees of whom 1,194 are employed in the 21 specified occupations covered and 751 in the unclassified productive and nonproductive occupations tabulated in this report for 1914 and 1915 for the first time. The information for 1914 and 1915 was obtained from 7 plants whose tonnage capacity is 50 per cent of the total capacity of all standard rail mills in the United States.

In this table occupations are grouped according to the wages paid, beginning with the lowest-paid group, and the occupations in each group are presented in alphabetical order. Classified full-time hours per week and rates of wages per hour are shown by means of percentages computed from the actual figures of Table M.

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<sup>1</sup> Summary figures relating to the standard-rail-mill department of the iron and steel industry are given with figures for other departments on pages 7 to 26; an account of the volume of employment in this and other departments from July, 1913, to June, 1915, is given on pages 26 to 55; and an explanation of the scope of the investigation and of the methods employed is given on pages 55 to 59.

TABLE 31.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, BY OCCUPATIONS, 1910 TO 1915—*STANDARD RAIL MILLS.*

[The figures for each group of years are for identical plants.]

| Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                 |     |                      | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                   | Average full-time weekly earnings. |
|-----------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|-----------------|-----|----------------------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|-------------------|------------------------------------|
|                                   |       |                      |                                   | Under 60                                                   | 60 and under 72 | 72  | Over 72 and under 84 |                                 | Under 16 cts.                                       | 16 and under 18 cts. | 18 and under 20 cts. | 20 and under 25 cts. | 25 cts. and over. |                                    |
|                                   |       |                      |                                   |                                                            |                 |     |                      |                                 |                                                     |                      |                      |                      |                   |                                    |
| Cold-saw men's helpers:           |       |                      |                                   |                                                            |                 |     |                      |                                 |                                                     |                      |                      |                      |                   |                                    |
| 3 plants.....                     | 1910  | 30                   | 76.0                              |                                                            |                 | 67  |                      | 33                              | \$0.171                                             | 100                  |                      |                      |                   | \$12.98                            |
|                                   | 1911  | 31                   | 72.0                              |                                                            |                 | 100 |                      |                                 | .172                                                | 100                  |                      |                      |                   | 12.40                              |
| 4 plants.....                     | 1911  | 36                   | 72.0                              |                                                            |                 | 100 |                      |                                 | .172                                                | 100                  |                      |                      |                   | 12.38                              |
|                                   | 1912  | 29                   | 72.0                              |                                                            |                 | 100 |                      |                                 | .173                                                | 100                  |                      |                      |                   | 12.45                              |
| 7 plants.....                     | 1912  | 54                   | 73.3                              |                                                            | 4               | 82  |                      | 15                              | .183                                                | 85                   |                      | 7                    | 7                 | 13.56                              |
|                                   | 1913  | 48                   | 73.5                              |                                                            | 4               | 79  |                      | 17                              | .204                                                | 25                   | 21                   | 38                   | 17                | 15.10                              |
| 6 plants.....                     | 1913  | 52                   | 73.8                              |                                                            |                 | 85  |                      | 15                              | .197                                                | 38                   | 15                   | 31                   | 15                | 14.70                              |
|                                   | 1914  | 44                   | 70.9                              |                                                            | 9               | 91  |                      |                                 | .185                                                | 36                   | 27                   | 36                   |                   | 13.14                              |
| 7 plants.....                     | 1914  | 48                   | 70.5                              |                                                            | 17              | 83  |                      |                                 | .186                                                | 33                   | 33                   | 33                   |                   | 13.09                              |
|                                   | 1915  | 52                   | 74.3                              |                                                            | 16              | 54  | 31                   |                                 | .185                                                | 38                   | 31                   | 31                   |                   | 13.82                              |
| Hotbed lever men:                 |       |                      |                                   |                                                            |                 |     |                      |                                 |                                                     |                      |                      |                      |                   |                                    |
| 6 plants.....                     | 1910  | 34                   | 74.1                              |                                                            |                 | 82  |                      | 18                              | .209                                                | 12                   | 41                   | 29                   | 18                | 15.61                              |
|                                   | 1911  | 27                   | 72.1                              |                                                            |                 | 70  | 30                   |                                 | .197                                                | 22                   | 33                   | 44                   |                   | 14.24                              |
| 7 plants.....                     | 1911  | 31                   | 72.1                              |                                                            |                 | 74  | 26                   |                                 | .195                                                | 26                   | 36                   | 39                   |                   | 14.06                              |
|                                   | 1912  | 35                   | 72.1                              |                                                            |                 | 77  | 23                   |                                 | .201                                                | 26                   | 34                   | 34                   | 6                 | 14.51                              |
| 7 plants.....                     | 1912  | 35                   | 72.1                              |                                                            |                 | 77  | 23                   |                                 | .195                                                |                      | 31                   | 34                   | 34                | 14.07                              |
|                                   | 1913  | 36                   | 72.1                              |                                                            |                 | 78  | 22                   |                                 | .213                                                |                      |                      | 72                   |                   | 15.36                              |
| 6 plants.....                     | 1913  | 34                   | 72.1                              |                                                            |                 | 76  | 24                   |                                 | .202                                                | 12                   |                      | 24                   | 65                | 14.57                              |
|                                   | 1914  | 30                   | 72.0                              |                                                            |                 | 100 |                      |                                 | .207                                                | 13                   |                      | 17                   | 60                | 14.93                              |
| 7 plants.....                     | 1914  | 32                   | 71.6                              |                                                            | 6               | 94  |                      |                                 | .213                                                | 13                   |                      | 16                   | 56                | 15.21                              |
|                                   | 1915  | 29                   | 71.8                              |                                                            | 3               | 97  |                      |                                 | .209                                                | 14                   |                      | 21                   | 55                | 14.94                              |
| Hotbed men:                       |       |                      |                                   |                                                            |                 |     |                      |                                 |                                                     |                      |                      |                      |                   |                                    |
| 6 plants.....                     | 1910  | 44                   | 73.6                              |                                                            |                 | 86  |                      | 14                              | .176                                                | 14                   | 36                   | 18                   | 32                | 12.95                              |
|                                   | 1911  | 43                   | 72.0                              |                                                            |                 | 100 |                      |                                 | .175                                                | 23                   | 42                   | 5                    | 30                | 12.60                              |
| 7 plants.....                     | 1911  | 47                   | 72.0                              |                                                            |                 | 100 |                      |                                 | .176                                                | 21                   | 43                   | 9                    | 28                | 12.65                              |
|                                   | 1912  | 48                   | 72.2                              |                                                            |                 | 96  | 4                    |                                 | .180                                                | 17                   | 52                   | 6                    | 17                | 12.98                              |
| 7 plants.....                     | 1912  | 46                   | 72.0                              |                                                            |                 | 100 |                      |                                 | .181                                                | 15                   | 52                   | 7                    | 17                | 13.01                              |
|                                   | 1913  | 48                   | 72.0                              |                                                            |                 | 100 |                      |                                 | .209                                                | 13                   |                      | 38                   | 38                | 15.01                              |
| 6 plants.....                     | 1913  | 56                   | 72.0                              |                                                            |                 | 100 |                      |                                 | .188                                                | 11                   | 29                   | 29                   | 32                | 13.54                              |
|                                   | 1914  | 41                   | 72.0                              |                                                            |                 | 100 |                      |                                 | .187                                                | 15                   | 39                   | 17                   | 5                 | 13.47                              |
| 7 plants.....                     | 1914  | 43                   | 71.7                              |                                                            | 5               | 95  |                      |                                 | .185                                                | 19                   | 37                   | 16                   | 5                 | 13.30                              |
|                                   | 1915  | 49                   | 71.9                              |                                                            | 2               | 98  |                      |                                 | .174                                                | 14                   | 45                   | 29                   | 12                | 12.54                              |
| Hot-saw men's helpers:            |       |                      |                                   |                                                            |                 |     |                      |                                 |                                                     |                      |                      |                      |                   |                                    |
| 6 plants.....                     | 1910  | 64                   | 72.4                              |                                                            |                 | 97  |                      | 3                               | .165                                                | 28                   | 63                   | 9                    |                   | 11.92                              |
|                                   | 1911  | 59                   | 72.1                              |                                                            |                 | 86  | 14                   |                                 | .168                                                | 15                   | 75                   | 10                   |                   | 12.14                              |
| 7 plants.....                     | 1911  | 66                   | 72.1                              |                                                            |                 | 88  | 12                   |                                 | .168                                                | 20                   | 71                   | 9                    |                   | 12.10                              |
|                                   | 1912  | 73                   | 72.1                              |                                                            |                 | 89  | 11                   |                                 | .169                                                | 4                    | 82                   | 14                   |                   | 12.20                              |
| 7 plants.....                     | 1912  | 55                   | 72.1                              |                                                            |                 | 85  | 15                   |                                 | .170                                                | 6                    | 76                   | 18                   |                   | 12.24                              |
|                                   | 1913  | 59                   | 72.1                              |                                                            |                 | 86  | 14                   |                                 | .201                                                |                      |                      | 54                   | 46                | 14.52                              |
| 6 plants.....                     | 1913  | 60                   | 72.1                              |                                                            |                 | 87  | 13                   |                                 | .197                                                |                      | 10                   | 63                   | 27                | 14.16                              |
|                                   | 1914  | 50                   | 72.0                              |                                                            |                 | 100 |                      |                                 | .201                                                |                      |                      | 48                   | 46                | 14.47                              |
| 7 plants.....                     | 1914  | 56                   | 71.3                              |                                                            | 11              | 89  |                      |                                 | .197                                                |                      |                      | 54                   | 41                | 14.08                              |
|                                   | 1915  | 61                   | 71.8                              |                                                            | 5               | 82  | 13                   |                                 | .189                                                |                      | 16                   | 67                   | 16                | 13.56                              |
| Laborers:                         |       |                      |                                   |                                                            |                 |     |                      |                                 |                                                     |                      |                      |                      |                   |                                    |
| 6 plants.....                     | 1910  | 501                  | 76.0                              |                                                            | 13              | 42  |                      | 45                              | .163                                                | 23                   | 77                   |                      |                   | 12.31                              |
|                                   | 1911  | 370                  | 71.9                              |                                                            | 21              | 59  | 12                   | 9                               | .169                                                | 10                   | 90                   |                      |                   | 12.12                              |
| 7 plants.....                     | 1911  | 382                  | 71.9                              |                                                            | 20              | 60  | 12                   | 8                               | .169                                                | 10                   | 90                   |                      |                   | 12.12                              |
|                                   | 1912  | 417                  | 71.9                              |                                                            | 20              | 57  | 16                   | 7                               | .168                                                | 5                    | 95                   |                      |                   | 12.07                              |
| 7 plants.....                     | 1912  | 327                  | 70.2                              |                                                            | 21              | 79  |                      | 1                               | .169                                                | 5                    | 95                   |                      |                   | 11.88                              |
|                                   | 1913  | 377                  | 70.5                              |                                                            | 17              | 82  |                      | 1                               | .193                                                |                      | 14                   | 49                   | 37                | 13.61                              |

TABLE 31.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, BY OCCUPATIONS, 1910 TO 1915—STANDARD RAIL MILLS—Continued.

| Occupation, and number of plants.            | Year.                | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                         |                   |                         |                         | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                         | Average full-time weekly earnings. |
|----------------------------------------------|----------------------|----------------------|-----------------------------------|------------------------------------------------------------|-------------------------|-------------------|-------------------------|-------------------------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|-------------------------|------------------------------------|
|                                              |                      |                      |                                   | Under 60                                                   | 60 and under 72         | 72                | Over 72 and under 84    | 84                      |                                 | Under 16 cts.                                       | 16 and under 18 cts. | 18 and under 20 cts. | 20 and under 25 cts. | 25 cts. and over.       |                                    |
|                                              |                      |                      |                                   |                                                            |                         |                   |                         |                         |                                 |                                                     |                      |                      |                      |                         |                                    |
| Laborers—Concluded.<br>6 plants.....         | 1913<br>1914         | 262<br>195           | 71.0<br>70.5                      | .....<br>.....                                             | 10<br>16                | 89<br>84          | .....<br>.....          | 1<br>.....              | \$0.187<br>.190                 | .....<br>.....                                      | 31<br>24             | 50<br>46             | 19<br>30             | .....<br>.....          | \$13.28<br>13.38                   |
| 7 plants.....                                | 1914<br>1915         | 222<br>339           | 69.9<br>71.0                      | .....<br>.....                                             | 27<br>11                | 73<br>89          | .....<br>.....          | .....<br>.....          | .185<br>.182                    | 6<br>.....                                          | 27<br>51             | 40<br>26             | 27<br>23             | .....<br>.....          | 12.99<br>12.95                     |
| Unclassified—productive:<br>7 plants.....    | 1914<br>1915         | 254<br>361           | 71.6<br>72.4                      | 1<br>1                                                     | 7<br>3                  | 89<br>87          | .....<br>3              | 3<br>6                  | .207<br>.203                    | 1<br>.....                                          | 14<br>23             | 28<br>31             | 44<br>31             | 12<br>14                | 14.82<br>14.65                     |
| Unclassified—nonproductive:<br>7 plants..... | 1914<br>1915         | 411<br>390           | 71.7<br>71.9                      | 1<br>4                                                     | 26<br>24                | 57<br>56          | 3<br>2                  | 13<br>15                | .226<br>.228                    | 1<br>3                                              | 7<br>6               | 30<br>32             | 36<br>33             | 26<br>26                | 16.17<br>16.29                     |
|                                              |                      |                      |                                   |                                                            |                         |                   |                         |                         |                                 |                                                     | 14 and under 20 cts. | 20 and under 25 cts. | 25 and under 30 cts. | 30 and under 40 cts.    | 40 cts. and over.                  |
| Charging-machine operators:<br>3 plants..... | 1910<br>1911<br>1912 | 22<br>22<br>22       | 72.0<br>72.0<br>72.0              | .....<br>.....<br>.....                                    | .....<br>.....<br>..... | 100<br>100<br>100 | .....<br>.....<br>..... | .....<br>.....<br>..... | .234<br>.232<br>.244            | 36<br>36<br>36                                      | 27<br>27<br>36       | .....<br>46<br>18    | 36<br>.....<br>..... | .....<br>.....<br>..... | 16.87<br>16.72<br>17.58            |
| 2 plants.....                                | 1912<br>1913         | 14<br>14             | 72.0<br>72.0                      | .....<br>.....                                             | .....<br>.....          | 100<br>100        | .....<br>.....          | .....<br>.....          | .284<br>.321                    | .....<br>.....                                      | .....<br>.....       | 71<br>.....          | 29<br>100            | .....<br>.....          | 20.43<br>23.12                     |
| 3 plants.....                                | 1913<br>1914<br>1915 | 22<br>22<br>22       | 72.0<br>72.0<br>72.0              | .....<br>.....<br>.....                                    | .....<br>.....<br>..... | 100<br>100<br>100 | .....<br>.....<br>..... | .....<br>.....<br>..... | .255<br>.280<br>.226            | .....<br>.....<br>100                               | 64<br>36<br>.....    | .....<br>27<br>..... | 36<br>36<br>.....    | .....<br>.....<br>..... | 18.39<br>20.17<br>16.27            |
| Chippers:<br>5 plants.....                   | 1910<br>1911         | 114<br>82            | 72.1<br>70.0                      | .....<br>.....                                             | 25<br>22                | 54<br>78          | .....<br>.....          | 22<br>.....             | .231<br>.240                    | 29<br>40                                            | 21<br>12             | 50<br>33             | .....<br>15          | .....<br>.....          | 16.78<br>16.88                     |
| 6 plants.....                                | 1911<br>1912         | 91<br>99             | 70.2<br>70.3                      | .....<br>.....                                             | 20<br>18                | 80<br>82          | .....<br>.....          | .....<br>.....          | .233<br>.221                    | 46<br>39                                            | 11<br>49             | 30<br>.....          | 13<br>12             | .....<br>.....          | 16.44<br>15.60                     |
| 7 plants.....                                | 1912<br>1913         | 113<br>103           | 70.2<br>70.0                      | .....<br>.....                                             | 19<br>17                | 81<br>83          | .....<br>.....          | .....<br>.....          | .224<br>.267                    | 40<br>3                                             | 43<br>29             | 7<br>49              | 11<br>19             | .....<br>.....          | 15.79<br>18.76                     |
| 5 plants.....                                | 1913<br>1914         | 60<br>44             | 72.0<br>72.0                      | .....<br>.....                                             | .....<br>.....          | 100<br>100        | .....<br>.....          | .....<br>.....          | .293<br>.258                    | .....<br>5                                          | .....<br>41          | 67<br>18             | 33<br>36             | .....<br>.....          | 21.09<br>18.56                     |
| 6 plants.....                                | 1914<br>1915         | 54<br>58             | 70.8<br>70.9                      | .....<br>.....                                             | 19<br>17                | 81<br>83          | .....<br>.....          | .....<br>.....          | .270<br>.301                    | 4<br>3                                              | 33<br>3              | 15<br>47             | 48<br>47             | .....<br>.....          | 19.07<br>21.31                     |
| Cold-saw men:<br>5 plants.....               | 1910<br>1911         | 18<br>18             | 74.7<br>69.1                      | .....<br>.....                                             | 33<br>44                | 11<br>33          | .....<br>22             | 56<br>.....             | .191<br>.194                    | 89<br>94                                            | 11<br>.....          | .....<br>6           | .....<br>.....       | .....<br>.....          | 14.21<br>13.43                     |
| 6 plants.....                                | 1911<br>1912         | 19<br>19             | 69.3<br>69.3                      | .....<br>.....                                             | 42<br>42                | 37<br>37          | 21<br>21                | .....<br>.....          | .194<br>.196                    | 95<br>95                                            | .....<br>.....       | 5<br>.....           | .....<br>5           | .....<br>.....          | 13.43<br>13.60                     |
| 6 plants.....                                | 1912<br>1913         | 22<br>23             | 71.8<br>72.3                      | .....<br>.....                                             | 36<br>35                | 27<br>26          | 18<br>17                | 18<br>22                | .213<br>.233                    | 77<br>.....                                         | .....<br>78          | 9<br>17              | 14<br>4              | .....<br>.....          | 15.50<br>17.04                     |
| 6 plants.....                                | 1913<br>1914         | 17<br>14             | 76.7<br>72.0                      | .....<br>.....                                             | .....<br>7              | 47<br>86          | 24<br>.....             | 29<br>7                 | .239<br>.219                    | .....<br>.....                                      | 71<br>93             | 24<br>.....          | 6<br>7               | .....<br>.....          | 18.47<br>15.77                     |
| 7 plants.....                                | 1914<br>1915         | 16<br>13             | 71.3<br>73.4                      | .....<br>.....                                             | 19<br>16                | 75<br>62          | .....<br>.....          | 6<br>23                 | .217<br>.218                    | .....<br>.....                                      | 94<br>92             | .....<br>.....       | 6<br>8               | .....<br>.....          | 15.46<br>15.95                     |

TABLE 31.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, BY OCCUPATIONS, 1910 TO 1915—STANDARD RAIL MILLS—Continued.

| Occupation, and number of plants.    | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                 |     |                      |      | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                   |         | Average full-time weekly earnings. |
|--------------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|-----------------|-----|----------------------|------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|-------------------|---------|------------------------------------|
|                                      |       |                      |                                   | Under 60                                                   | 60 and under 72 | 72  | Over 72 and under 84 | 84   |                                 | 14 and under 20 cts.                                | 20 and under 25 cts. | 25 and under 30 cts. | 30 and under 40 cts. | 40 cts. and over. |         |                                    |
|                                      |       |                      |                                   |                                                            |                 |     |                      |      |                                 |                                                     |                      |                      |                      |                   |         |                                    |
| Drillers and punchers: 5 plants..... | 1910  | 152                  | 76.7                              |                                                            | 13              | 34  |                      | 53   | \$0.220                         | 18                                                  | 47                   | 34                   |                      |                   | \$16.78 |                                    |
|                                      | 1911  | 123                  | 70.5                              |                                                            | 17              | 83  |                      |      | .221                            | 49                                                  | 27                   | 24                   |                      |                   | 15.59   |                                    |
| 6 plants.....                        | 1911  | 133                  | 70.6                              |                                                            | 16              | 84  |                      |      | .218                            | 53                                                  | 25                   | 23                   |                      |                   | 15.35   |                                    |
|                                      | 1912  | 145                  | 70.5                              |                                                            | 17              | 83  |                      |      | .206                            | 61                                                  | 37                   |                      | 1                    |                   | 14.51   |                                    |
| 7 plants.....                        | 1912  | 203                  | 70.5                              |                                                            | 17              | 83  |                      |      | .214                            | 57                                                  | 35                   | 8                    | 1                    |                   | 15.05   |                                    |
|                                      | 1913  | 179                  | 70.5                              |                                                            | 13              | 87  |                      |      | .249                            | 1                                                   | 56                   | 36                   | 7                    |                   | 17.45   |                                    |
| 5 plants.....                        | 1913  | 102                  | 72.0                              |                                                            |                 | 100 |                      |      | .245                            |                                                     | 43                   | 57                   |                      |                   | 17.60   |                                    |
|                                      | 1914  | 88                   | 72.0                              |                                                            |                 | 109 |                      |      | .233                            |                                                     | 55                   | 39                   | 7                    |                   | 16.75   |                                    |
| 6 plants.....                        | 1914  | 100                  | 71.2                              |                                                            | 12              | 88  |                      |      | .251                            |                                                     | 48                   | 34                   | 18                   |                   | 17.80   |                                    |
|                                      | 1915  | 90                   | 71.0                              |                                                            | 16              | 84  |                      |      | .280                            |                                                     | 33                   | 51                   |                      | 16                | 19.67   |                                    |
| Hot-saw men: 6 plants.....           | 1910  | 19                   | 72.0                              |                                                            |                 | 100 |                      |      | .289                            |                                                     | 37                   | 11                   | 53                   |                   | 20.79   |                                    |
|                                      | 1911  | 14                   | 72.0                              |                                                            |                 | 100 |                      |      | .238                            |                                                     | 50                   | 36                   | 14                   |                   | 18.56   |                                    |
| 7 plants.....                        | 1911  | 16                   | 72.0                              |                                                            |                 | 100 |                      |      | .251                            |                                                     | 56                   | 31                   | 13                   |                   | 18.10   |                                    |
|                                      | 1912  | 18                   | 72.0                              |                                                            |                 | 100 |                      |      | .257                            | 17                                                  | 28                   | 44                   | 11                   |                   | 18.52   |                                    |
| 7 plants.....                        | 1912  | 20                   | 72.0                              |                                                            |                 | 100 |                      |      | .260                            | 15                                                  | 25                   | 40                   | 20                   |                   | 18.69   |                                    |
|                                      | 1913  | 20                   | 72.0                              |                                                            |                 | 100 |                      |      | .283                            |                                                     | 30                   | 25                   | 45                   |                   | 20.36   |                                    |
| 6 plants.....                        | 1913  | 16                   | 72.0                              |                                                            |                 | 100 |                      |      | .259                            |                                                     | 50                   | 25                   | 25                   |                   | 18.67   |                                    |
|                                      | 1914  | 16                   | 72.0                              |                                                            |                 | 100 |                      |      | .265                            |                                                     | 44                   | 38                   | 19                   |                   | 19.08   |                                    |
| 7 plants.....                        | 1914  | 17                   | 71.6                              |                                                            | 6               | 94  |                      |      | .263                            |                                                     | 47                   | 35                   | 18                   |                   | 18.86   |                                    |
|                                      | 1915  | 17                   | 71.6                              |                                                            | 6               | 94  |                      |      | .272                            | 12                                                  | 29                   | 35                   | 24                   |                   | 19.52   |                                    |
| Inspectors: 5 plants.....            | 1910  | 68                   | 75.5                              |                                                            | 13              | 44  |                      | 43   | .225                            | 44                                                  | 4                    | 3                    | 7                    | 2                 | 16.77   |                                    |
|                                      | 1911  | 48                   | 70.4                              |                                                            | 19              | 81  |                      |      | .233                            | 29                                                  | 56                   | 4                    | 8                    | 2                 | 16.29   |                                    |
| 7 plants.....                        | 1911  | 68                   | 70.9                              |                                                            | 13              | 87  |                      |      | .230                            | 21                                                  | 60                   | 12                   | 6                    | 2                 | 16.25   |                                    |
|                                      | 1912  | 76                   | 71.0                              |                                                            | 12              | 88  |                      |      | .228                            | 28                                                  | 57                   | 9                    | 3                    | 4                 | 16.12   |                                    |
| 7 plants.....                        | 1912  | 74                   | 70.9                              |                                                            | 12              | 88  |                      |      | .229                            | 28                                                  | 55                   | 10                   | 3                    | 4                 | 16.17   |                                    |
|                                      | 1913  | 73                   | 70.5                              |                                                            | 16              | 84  |                      |      | .258                            |                                                     | 48                   | 40                   | 8                    | 4                 | 18.11   |                                    |
| 6 plants.....                        | 1913  | 67                   | 71.6                              |                                                            | 9               | 91  |                      |      | .244                            |                                                     | 55                   | 36                   | 9                    |                   | 17.46   |                                    |
|                                      | 1914  | 58                   | 70.9                              |                                                            | 24              | 76  |                      |      | .240                            |                                                     | 66                   | 24                   | 10                   |                   | 16.95   |                                    |
| 7 plants.....                        | 1914  | 62                   | 70.5                              |                                                            | 29              | 71  |                      |      | .236                            | 3                                                   | 65                   | 23                   | 10                   |                   | 16.65   |                                    |
|                                      | 1915  | 80                   | 71.5                              |                                                            | 12              | 81  | 8                    |      | .239                            | 8                                                   | 54                   | 28                   | 11                   |                   | 17.11   |                                    |
| Reheaters' helpers: 3 plants.....    | 1910  | 24                   | 71.3                              |                                                            | 50              | 50  |                      |      | .280                            | 4                                                   | 46                   |                      | 50                   |                   | 19.95   |                                    |
|                                      | 1911  | 24                   | 72.0                              |                                                            |                 | 100 |                      |      | .264                            | 4                                                   | 25                   | 71                   |                      |                   | 18.98   |                                    |
| 3 plants.....                        | 1912  | 24                   | 72.0                              |                                                            |                 | 100 |                      |      | .304                            | 4                                                   | 4                    | 46                   | 46                   |                   | 21.87   |                                    |
|                                      | 1913  | 23                   | 72.0                              |                                                            |                 | 100 |                      |      | .345                            |                                                     | 4                    |                      | 96                   |                   | 24.87   |                                    |
| 2 plants.....                        | 1913  | 22                   | 72.0                              |                                                            |                 | 100 |                      |      | .324                            |                                                     |                      | 45                   | 55                   |                   | 23.30   |                                    |
|                                      | 1914  | 20                   | 72.0                              |                                                            |                 | 100 |                      |      | .354                            |                                                     |                      | 75                   | 25                   |                   | 25.49   |                                    |
| 1915                                 | 20    | 72.0                 |                                   |                                                            | 100             |     |                      | .254 |                                 | 45                                                  | 55                   |                      |                      |                   | 18.27   |                                    |
| Roll engineers: 6 plants.....        | 1910  | 42                   | 77.4                              |                                                            |                 | 48  | 14                   | 38   | .310                            |                                                     | 38                   | 24                   | 14                   | 24                | 24.30   |                                    |
|                                      | 1911  | 37                   | 76.2                              |                                                            |                 | 49  | 32                   | 19   | .282                            |                                                     | 43                   | 27                   | 24                   | 5                 | 21.67   |                                    |
| 7 plants.....                        | 1911  | 43                   | 75.8                              |                                                            |                 | 42  | 42                   | 16   | .277                            |                                                     | 47                   | 28                   | 21                   | 5                 | 21.14   |                                    |
|                                      | 1912  | 48                   | 74.1                              |                                                            |                 | 58  | 38                   | 4    | .304                            |                                                     | 27                   | 40                   | 25                   | 8                 | 22.44   |                                    |
| 7 plants.....                        | 1912  | 32                   | 75.2                              |                                                            |                 | 44  | 44                   | 13   | .307                            |                                                     | 38                   | 25                   | 25                   | 13                | 22.95   |                                    |
|                                      | 1913  | 32                   | 74.9                              |                                                            |                 | 63  | 25                   | 13   | .323                            |                                                     |                      | 50                   | 38                   | 13                | 24.16   |                                    |
| 6 plants.....                        | 1913  | 28                   | 74.9                              |                                                            |                 | 64  | 21                   | 14   | .287                            |                                                     | 14                   | 43                   | 43                   |                   | 21.48   |                                    |
|                                      | 1914  | 28                   | 73.7                              |                                                            |                 | 86  |                      | 14   | .301                            |                                                     | 14                   | 36                   | 43                   | 7                 | 22.22   |                                    |
| 7 plants.....                        | 1914  | 32                   | 73.5                              |                                                            |                 | 88  |                      | 12   | .317                            |                                                     | 13                   | 31                   | 38                   | 19                | 23.33   |                                    |
|                                      | 1915  | 30                   | 72.5                              |                                                            |                 | 80  | 20                   |      | .322                            |                                                     | 13                   | 33                   | 33                   | 20                | 23.30   |                                    |

TABLE 31.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, BY OCCUPATIONS, 1910 TO 1915—STANDARD RAIL MILLS—Continued.

| Occupation, and number of plants.        | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                 |     |                      | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                   | Average full-time weekly earnings. |
|------------------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|-----------------|-----|----------------------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|-------------------|------------------------------------|
|                                          |       |                      |                                   | Under 60                                                   | 60 and under 72 | 72  | Over 72 and under 84 |                                 | 14 and under 20 cts.                                | 20 and under 25 cts. | 25 and under 30 cts. | 30 and under 40 cts. | 40 cts. and over. |                                    |
|                                          |       |                      |                                   |                                                            |                 |     |                      |                                 |                                                     |                      |                      |                      |                   |                                    |
| Straighteners' helpers:<br>5 plants..... | 1910  | 139                  | 72.1                              |                                                            | 17              | 66  |                      | 17                              | \$0.205                                             | 53                   | 30                   | 1                    | 17                | \$14.55                            |
|                                          | 1911  | 116                  | 69.8                              |                                                            | 18              | 82  |                      |                                 | .205                                                | 70                   | 12                   | 18                   |                   | 14.04                              |
| 6 plants.....                            | 1911  | 120                  | 69.9                              |                                                            | 17              | 83  |                      |                                 | .205                                                | 68                   | 15                   |                      | 18                | 14.05                              |
|                                          | 1912  | 134                  | 70.0                              |                                                            | 16              | 84  |                      |                                 | .212                                                | 67                   | 13                   | 3                    | 12                | 14.51                              |
| 7 plants.....                            | 1912  | 146                  | 70.2                              |                                                            | 15              | 85  |                      |                                 | .211                                                | 62                   | 21                   | 3                    | 11                | 14.54                              |
|                                          | 1913  | 131                  | 70.0                              |                                                            | 17              | 83  |                      |                                 | .253                                                | 26                   | 54                   | 3                    |                   | 17.28                              |
| 5 plants.....                            | 1913  | 125                  | 72.0                              |                                                            |                 | 100 |                      |                                 | .205                                                | 48                   | 52                   |                      |                   | 14.73                              |
|                                          | 1914  | 97                   | 72.0                              |                                                            |                 | 100 |                      |                                 | .215                                                | 14                   | 86                   |                      |                   | 15.50                              |
| 6 plants.....                            | 1914  | 102                  | 71.7                              |                                                            | 5               | 95  |                      |                                 | .226                                                | 14                   | 81                   |                      | 5                 | 16.12                              |
|                                          | 1915  | 118                  | 71.4                              |                                                            | 8               | 92  |                      |                                 | .219                                                | 54                   | 37                   |                      | 8                 | 15.47                              |
| Table men:<br>4 plants.....              | 1910  | 26                   | 72.0                              |                                                            |                 | 100 |                      |                                 | .279                                                | 23                   |                      | 39                   | 39                | 20.06                              |
|                                          | 1911  | 26                   | 72.0                              |                                                            |                 | 100 |                      |                                 | .264                                                | 23                   | 8                    | 46                   | 23                | 19.00                              |
| 5 plants.....                            | 1911  | 27                   | 72.4                              |                                                            |                 | 96  | 4                    |                                 | .262                                                | 22                   | 11                   | 44                   | 22                | 18.97                              |
|                                          | 1912  | 25                   | 72.5                              |                                                            |                 | 96  |                      | 4                               | .287                                                | 16                   | 12                   | 20                   | 52                | 20.77                              |
| 5 plants.....                            | 1912  | 30                   | 72.0                              |                                                            |                 | 100 |                      |                                 | .324                                                | 13                   | 7                    | 17                   | 43                | 23.32                              |
|                                          | 1913  | 30                   | 72.0                              |                                                            |                 | 100 |                      |                                 | .354                                                |                      | 17                   |                      | 70                | 25.47                              |
| 3 plants.....                            | 1913  | 28                   | 72.0                              |                                                            |                 | 100 |                      |                                 | .437                                                |                      | 18                   |                      | 4                 | 31.49                              |
|                                          | 1914  | 24                   | 72.0                              |                                                            |                 | 100 |                      |                                 | .327                                                | 21                   | 4                    | 58                   | 17                | 23.57                              |
| 4 plants.....                            | 1914  | 32                   | 70.4                              |                                                            | 25              | 75  |                      |                                 | .356                                                | 16                   | 3                    | 56                   | 25                | 24.92                              |
|                                          | 1915  | 28                   | 71.1                              |                                                            | 14              | 86  |                      |                                 | .336                                                | 14                   | 29                   | 43                   | 14                | 23.68                              |
| Guide setters:<br>5 plants.....          | 1910  | 20                   | 66.8                              | 15                                                         | 15              | 70  |                      |                                 | .440                                                | 10                   | 25                   | 20                   | 45                | 29.26                              |
|                                          | 1911  | 17                   | 65.8                              | 18                                                         | 18              | 65  |                      |                                 | .373                                                | 18                   | 41                   | 35                   | 6                 | 24.31                              |
| 7 plants.....                            | 1911  | 27                   | 66.8                              | 11                                                         | 26              | 41  | 22                   |                                 | .336                                                | 37                   | 37                   | 22                   | 4                 | 22.20                              |
|                                          | 1912  | 30                   | 67.3                              | 10                                                         | 23              | 47  | 20                   | 4                               | .346                                                | 40                   | 30                   | 27                   | 3                 | 23.14                              |
| 4 plants.....                            | 1912  | 17                   | 68.3                              | 18                                                         |                 | 47  | 35                   |                                 | .340                                                | 41                   | 41                   | 12                   | 6                 | 22.61                              |
|                                          | 1913  | 17                   | 69.2                              | 18                                                         |                 | 47  | 35                   |                                 | .384                                                | 12                   | 47                   | 41                   |                   | 26.20                              |
| 4 plants.....                            | 1913  | 17                   | 67.9                              | 18                                                         |                 | 82  |                      |                                 | .394                                                | 6                    | 65                   | 29                   |                   | 26.49                              |
|                                          | 1914  | 17                   | 67.8                              | 18                                                         |                 | 82  |                      |                                 | .386                                                | 12                   | 47                   | 29                   | 12                | 26.31                              |
| 5 plants.....                            | 1914  | 21                   | 68.6                              | 14                                                         |                 | 86  |                      |                                 | .394                                                | 10                   | 38                   | 43                   | 10                | 27.11                              |
|                                          | 1915  | 21                   | 68.6                              | 14                                                         |                 | 86  |                      |                                 | .417                                                | 19                   | 19                   | 48                   | 14                | 28.45                              |
| Reheaters:<br>4 plants.....              | 1910  | 23                   | 72.2                              |                                                            |                 | 91  | 9                    |                                 | .429                                                | 4                    |                      | 96                   |                   | 31.00                              |
|                                          | 1911  | 23                   | 72.0                              |                                                            |                 | 100 |                      |                                 | .421                                                | 4                    | 44                   | 52                   |                   | 30.28                              |
| 3 plants.....                            | 1912  | 23                   | 72.0                              |                                                            |                 | 100 |                      |                                 | .410                                                | 48                   | 4                    | 4                    | 44                | 29.50                              |
|                                          | 1912  | 13                   | 72.0                              |                                                            |                 | 100 |                      |                                 | .531                                                | 8                    | 8                    | 8                    | 77                | 38.23                              |
| 3 plants.....                            | 1913  | 13                   | 72.0                              |                                                            |                 | 100 |                      |                                 | .586                                                |                      | 8                    | 15                   |                   | 42.23                              |
|                                          | 1913  | 14                   | 72.0                              |                                                            |                 | 100 |                      |                                 | .382                                                |                      | 71                   | 29                   |                   | 27.53                              |
|                                          | 1914  | 14                   | 72.0                              |                                                            |                 | 100 |                      |                                 | .336                                                | 36                   | 50                   | 7                    | 7                 | 24.18                              |
|                                          | 1915  | 12                   | 72.0                              |                                                            |                 | 100 |                      |                                 | .385                                                | 33                   | 67                   |                      |                   | 27.70                              |



TABLE 31.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, BY OCCUPATIONS, 1910 TO 1915—STANDARD RAIL MILLS—Concluded.

| Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                 |     |                      | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                   | Average full-time weekly earnings. |         |
|-----------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|-----------------|-----|----------------------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|-------------------|------------------------------------|---------|
|                                   |       |                      |                                   | Under 60                                                   | 60 and under 72 | 72  | Over 72 and under 84 |                                 | Under 30 cts.                                       | 30 and under 40 cts. | 40 and under 50 cts. | 50 and under 60 cts. | 60 cts. and over. |                                    |         |
|                                   |       |                      |                                   |                                                            |                 |     |                      |                                 |                                                     |                      |                      |                      |                   |                                    |         |
| Rollers:                          |       |                      |                                   |                                                            |                 |     |                      |                                 |                                                     |                      |                      |                      |                   |                                    |         |
| 5 plants.....                     | 1910  | 12                   | 72.3                              |                                                            |                 | 83  | 17                   | .....                           | \$0.624                                             |                      |                      |                      | 33                | 67                                 | \$45.09 |
|                                   | 1911  | 12                   | 72.3                              |                                                            |                 | 83  | 17                   | .....                           | .614                                                |                      |                      | 8                    | 25                | 67                                 | 44.40   |
| 6 plants.....                     | 1911  | 14                   | 72.2                              |                                                            |                 | 86  | 14                   | .....                           | .591                                                |                      |                      | 21                   | 21                | 57                                 | 42.67   |
|                                   | 1912  | 14                   | 72.2                              |                                                            |                 | 86  | 14                   | .....                           | .646                                                |                      |                      | 7                    | 7                 | 86                                 | 46.65   |
|                                   | 1913  | 14                   | 72.6                              |                                                            |                 | 79  | 21                   | .....                           | .690                                                |                      |                      |                      |                   | 100                                | 50.18   |
| 5 plants.....                     | 1913  | 12                   | 72.3                              |                                                            |                 | 83  | 17                   | .....                           | .622                                                |                      |                      |                      | 17                | 83                                 | 44.95   |
|                                   | 1914  | 12                   | 72.0                              |                                                            |                 | 100 |                      | .....                           | .655                                                |                      |                      |                      | 17                | 83                                 | 47.18   |
| 6 plants.....                     | 1914  | 14                   | 71.1                              |                                                            | 14              | 86  |                      | .....                           | .649                                                |                      |                      |                      | 14                | 86                                 | 46.16   |
|                                   | 1915  | 13                   | 71.5                              |                                                            | 8               | 92  |                      | .....                           | .603                                                |                      |                      |                      | 31                | 69                                 | 43.09   |
| Rollers' helpers:                 |       |                      |                                   |                                                            |                 |     |                      |                                 |                                                     |                      |                      |                      |                   |                                    |         |
| 1 plant.....                      | 1910  | 3                    | 72.0                              |                                                            |                 | 100 |                      | .....                           | .561                                                |                      |                      |                      | 100               |                                    | 40.39   |
|                                   | 1911  | 1                    | 72.0                              |                                                            |                 | 100 |                      | .....                           | .458                                                |                      |                      | 100                  |                   |                                    | 32.98   |
| 2 plants.....                     | 1911  | 3                    | 72.7                              |                                                            |                 | 33  | 67                   | .....                           | .284                                                | 67                   |                      | 33                   |                   |                                    | 20.56   |
|                                   | 1912  | 6                    | 72.6                              |                                                            |                 | 33  | 67                   | .....                           | .304                                                | 67                   |                      | 33                   |                   |                                    | 21.98   |
|                                   | 1913  | 6                    | 73.3                              |                                                            |                 | 50  | 50                   | .....                           | .323                                                | 67                   | 33                   |                      |                   |                                    | 23.61   |
| 1 plant.....                      | 1913  | 2                    | 72.0                              |                                                            |                 | 100 |                      | .....                           | .396                                                |                      | 100                  |                      |                   |                                    | 28.51   |
|                                   | 1914  | 2                    | 72.0                              |                                                            |                 | 100 |                      | .....                           | .470                                                |                      |                      | 50                   | 50                |                                    | 33.80   |
| 2 plants.....                     | 1914  | 4                    | 72.0                              |                                                            |                 |     |                      | .....                           | .468                                                |                      |                      | 75                   | 25                |                                    | 33.66   |
|                                   | 1915  | 4                    | 72.0                              |                                                            |                 | 100 |                      | .....                           | .407                                                |                      | 50                   | 25                   | 25                |                                    | 29.30   |
| Straighteners, gag press:         |       |                      |                                   |                                                            |                 |     |                      |                                 |                                                     |                      |                      |                      |                   |                                    |         |
| 5 plants.....                     | 1910  | 106                  | 59.0                              | 62                                                         | 6               | 11  |                      | 21                              | .564                                                |                      |                      | 49                   | 11                | 40                                 | 32.41   |
|                                   | 1911  | 90                   | 56.3                              | 62                                                         | 7               | 31  |                      |                                 | .534                                                |                      | 16                   | 30                   |                   | 54                                 | 30.12   |
| 6 plants.....                     | 1911  | 94                   | 56.9                              | 60                                                         | 6               | 34  |                      |                                 | .526                                                |                      | 19                   | 29                   |                   | 52                                 | 29.91   |
|                                   | 1912  | 98                   | 57.6                              | 57                                                         | 6               | 37  |                      |                                 | .530                                                |                      | 25                   | 18                   |                   | 57                                 | 30.79   |
| 7 plants.....                     | 1912  | 110                  | 59.1                              | 51                                                         | 6               | 44  |                      |                                 | .514                                                |                      | 33                   | 16                   |                   | 51                                 | 30.45   |
|                                   | 1913  | 101                  | 59.2                              | 51                                                         | 6               | 44  |                      |                                 | .576                                                |                      |                      | 36                   | 18                | 47                                 | 34.06   |
| 5 plants.....                     | 1913  | 89                   | 55.0                              | 71                                                         |                 | 29  |                      |                                 | .552                                                |                      |                      | 54                   |                   | 46                                 | 30.41   |
|                                   | 1914  | 75                   | 54.7                              | 72                                                         |                 | 28  |                      |                                 | .533                                                |                      | 32                   | 11                   | 16                | 41                                 | 29.44   |
| 6 plants.....                     | 1914  | 84                   | 53.7                              | 75                                                         |                 | 25  |                      |                                 | .571                                                |                      | 29                   | 10                   | 14                | 48                                 | 30.59   |
|                                   | 1915  | 85                   | 56.2                              | 64                                                         |                 | 36  |                      |                                 | .612                                                |                      | 9                    | 39                   | 8                 | 44                                 | 34.22   |
| Table lever men:                  |       |                      |                                   |                                                            |                 |     |                      |                                 |                                                     |                      |                      |                      |                   |                                    |         |
| 6 plants.....                     | 1910  | 74                   | 65.5                              | 32                                                         |                 | 60  |                      | 8                               | .454                                                | 5                    | 43                   | 27                   |                   | 24                                 | 28.25   |
|                                   | 1911  | 69                   | 64.0                              | 35                                                         |                 | 65  |                      |                                 | .422                                                | 22                   | 30                   | 19                   | 23                | 6                                  | 26.08   |
|                                   | 1912  | 74                   | 64.5                              | 32                                                         |                 | 68  |                      |                                 | .427                                                | 26                   | 18                   | 16                   | 38                | 3                                  | 26.82   |
| 6 plants.....                     | 1912  | 80                   | 67.1                              | 23                                                         |                 | 75  |                      | 3                               | .392                                                | 39                   | 16                   | 15                   | 28                | 3                                  | 25.62   |
|                                   | 1913  | 80                   | 67.1                              | 23                                                         |                 | 75  |                      | 3                               | .416                                                | 29                   | 26                   | 13                   | 18                | 15                                 | 27.51   |
| 6 plants.....                     | 1913  | 52                   | 64.0                              | 35                                                         |                 | 65  |                      |                                 | .377                                                | 21                   | 48                   | 12                   | 19                |                                    | 23.28   |
|                                   | 1914  | 52                   | 63.7                              | 35                                                         |                 | 65  |                      |                                 | .328                                                | 33                   | 58                   | 10                   |                   |                                    | 20.61   |
| 7 plants.....                     | 1914  | 62                   | 64.0                              | 29                                                         | 16              | 55  |                      |                                 | .324                                                | 27                   | 65                   | 8                    |                   |                                    | 20.49   |
|                                   | 1915  | 53                   | 65.0                              | 26                                                         | 9               | 64  |                      |                                 | .366                                                | 42                   | 25                   | 13                   | 21                |                                    | 22.92   |

Referring to the first occupation of Table 31, cold-saw men's helpers, direct comparison can be made for three identical plants in 1910 and 1911, for four identical plants in 1911 and 1912, for seven identical plants in 1912 and 1913, for six identical plants in 1913 and 1914, and for seven identical plants in 1914 and 1915. The first line of the table is read as follows: In 1910 the three standard rail mills from which reports were obtained employed 30 cold-saw men's helpers, whose average full-time hours of work were 76 per week. For 67 per cent of these cold-saw men's helpers the full-time hours per week were 72 and for the remaining one-third the working hours were 84 per week. The average rate of wages or earnings per hour of cold-saw men's helpers in the year considered (1910) was 17.1 cents. All of the 30 employees received 16 and under 18 cents per hour. The average full-time weekly earnings were \$12.98. The other lines of the table may be read in the same manner.

Referring to the last column of the table, it is seen that in three plants the average full-time weekly earnings of cold-saw men's helpers were \$12.98 in 1910, and in 1911 in the same three plants the average dropped to \$12.40; in four plants in 1911 the average was \$12.38, while in 1912 there was a slight increase to \$12.45; in seven plants the full-time weekly earnings were \$13.56 in 1912 and \$15.10 in 1913; in six plants in 1913 and 1914 these earnings were \$14.70 and \$13.14, respectively, while in the group of seven plants in 1914 and 1915 they were \$13.09 in 1914 and \$13.82 in 1915. The highest point reached was for 1913 when it was \$15.10 in the group for seven plants and \$14.70 in the group for six plants. The figures for the two years show an appreciable difference which is readily accounted for by reference to the details. Comparing the average full-time weekly earnings for 1915 in the several occupations, it is seen that the lowest average was that of hotbed men, which was \$12.54. Several occupations received but little more. The highest earnings in any occupation of this department are found in the occupation of rollers, the average full-time weekly earnings in this occupation in 1915 being \$43.09.

#### INDEX NUMBERS.

Owing to changes in the number of plants reported from year to year, and the consequent differences in the averages for the overlapping year in two groups of plants, it is difficult to make a comparison of the actual data for the various years which will give an accurate measure of the changes throughout the period. To aid in making such a comparison relative or index numbers have been computed from the averages of Table 31 for full-time hours per week, rates of wages per hour, and full-time weekly earnings, for each occupation from 1910 to 1915 inclusive. Such figures appear in Table 32. These relative or index numbers are simply percentages

for which the data for 1915 are taken as the base, or 100 per cent. The relative for each year is the per cent which the average for that year is of the average for 1915. For example, relative full-time weekly earnings of charging-machine operators in 1910 were 96 per cent of the full-time weekly earnings in this occupation in 1915. The method of computing relative numbers is explained on pages 65 to 67.

Table 32 also shows for each occupation the per cent of increase or decrease in full-time hours per week, rates of wages per hour, and full-time weekly earnings in 1915 as compared with each specified year preceding. Thus the full-time weekly earnings of charging-machine operators in 1915 were 4 per cent higher than in 1910, 5 per cent higher than in 1911, no change in 1912, 12 per cent lower than in 1913, and 19 per cent lower than in 1914.

In other columns of this table is shown the per cent of change in each year as compared with the year immediately preceding. Thus the full-time weekly earnings of charging-machine operators in 1911 were 1 per cent lower than in 1910, 5 per cent higher in 1912 than in 1911, 13 per cent higher in 1913 than in 1912, 10 per cent higher in 1914 than in 1913, and 19 per cent lower in 1915 than in 1914. The other occupations and items of the table may be studied in like manner. The percentages of increase and decrease are computed from the relative numbers.

TABLE 32.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATIONS—STANDARD RAIL MILLS.

| Occupation and year.               | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|------------------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                                    | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in— |                                                      |
|                                    |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| <b>Charging-machine operators:</b> |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                          | 100                                | (1)                                          | .....                                                | 96                               | + 4                                          | .....                                                | 96                                  | + 4                                          | .....                                                |
| 1911.....                          | 100                                | (1)                                          | (1)                                                  | 95                               | + 5                                          | — 1                                                  | 95                                  | + 5                                          | — 1                                                  |
| 1912.....                          | 100                                | (1)                                          | (1)                                                  | 100                              | (1)                                          | + 5                                                  | 100                                 | (1)                                          | + 5                                                  |
| 1913.....                          | 100                                | (1)                                          | (1)                                                  | 113                              | — 12                                         | + 13                                                 | 113                                 | — 12                                         | + 13                                                 |
| 1914.....                          | 100                                | (1)                                          | (1)                                                  | 124                              | — 19                                         | + 10                                                 | 124                                 | — 19                                         | + 10                                                 |
| 1915.....                          | 100                                | (1)                                          | (1)                                                  | 100                              | .....                                        | — 19                                                 | 100                                 | .....                                        | — 19                                                 |
| <b>Reheaters:</b>                  |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                          | 100                                | (1)                                          | .....                                                | 94                               | + 6                                          | .....                                                | 95                                  | + 5                                          | .....                                                |
| 1911.....                          | 100                                | (1)                                          | (1)                                                  | 92                               | + 9                                          | — 2                                                  | 92                                  | + 9                                          | — 3                                                  |
| 1912.....                          | 100                                | (1)                                          | (1)                                                  | 90                               | + 11                                         | — 2                                                  | 90                                  | + 11                                         | — 2                                                  |
| 1913.....                          | 100                                | (1)                                          | (1)                                                  | 93                               | + 1                                          | + 10                                                 | 99                                  | + 1                                          | + 2                                                  |
| 1914.....                          | 100                                | (1)                                          | (1)                                                  | 87                               | + 15                                         | — 12                                                 | 87                                  | + 15                                         | — 12                                                 |
| 1915.....                          | 100                                | (1)                                          | (1)                                                  | 100                              | .....                                        | + 15                                                 | 100                                 | .....                                        | + 15                                                 |

<sup>1</sup> No change.

## 272 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

TABLE 32.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATIONS—STANDARD RAIL MILLS—Continued.

| Occupation and year.       | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|----------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                            | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in— |                                                      |
|                            |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| <b>Reheaters' helpers:</b> |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                  | 99                                 | + 1                                          | .....                                                | 104                              | — 4                                          | .....                                                | 102                                 | — 2                                          | .....                                                |
| 1911.....                  | 100                                | (1)                                          | + 1                                                  | 98                               | + 2                                          | — 6                                                  | 97                                  | + 3                                          | — 5                                                  |
| 1912.....                  | 100                                | (1)                                          | .....                                                | 112                              | — 11                                         | + 14                                                 | 112                                 | — 11                                         | + 15                                                 |
| 1913.....                  | 100                                | (1)                                          | (1)                                                  | 128                              | — 22                                         | + 14                                                 | 128                                 | — 22                                         | + 14                                                 |
| 1914.....                  | 100                                | (1)                                          | (1)                                                  | 139                              | — 28                                         | + 9                                                  | 140                                 | — 29                                         | + 9                                                  |
| 1915.....                  | 100                                | .....                                        | (1)                                                  | 100                              | .....                                        | — 28                                                 | 100                                 | .....                                        | — 29                                                 |
| <b>Roll engineers:</b>     |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                  | 108                                | — 7                                          | .....                                                | 89                               | + 12                                         | .....                                                | 97                                  | + 3                                          | .....                                                |
| 1911.....                  | 106                                | — 6                                          | — 2                                                  | 81                               | + 23                                         | — 9                                                  | 87                                  | + 15                                         | — 10                                                 |
| 1912.....                  | 103                                | — 3                                          | — 3                                                  | 89                               | + 12                                         | + 10                                                 | 92                                  | + 9                                          | + 6                                                  |
| 1913.....                  | 103                                | — 3                                          | (1)                                                  | 94                               | + 6                                          | + 6                                                  | 97                                  | + 3                                          | + 5                                                  |
| 1914.....                  | 101                                | — 1                                          | — 2                                                  | 98                               | + 2                                          | + 4                                                  | 100                                 | (1)                                          | + 3                                                  |
| 1915.....                  | 100                                | .....                                        | — 1                                                  | 100                              | .....                                        | + 2                                                  | 100                                 | .....                                        | (1)                                                  |
| <b>Rollers:</b>            |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                  | 99                                 | + 1                                          | .....                                                | 89                               | + 12                                         | .....                                                | 88                                  | + 14                                         | .....                                                |
| 1911.....                  | 99                                 | + 1                                          | (1)                                                  | 88                               | + 14                                         | — 1                                                  | 87                                  | + 15                                         | — 1                                                  |
| 1912.....                  | 99                                 | + 1                                          | (1)                                                  | 96                               | + 4                                          | + 9                                                  | 95                                  | + 5                                          | + 9                                                  |
| 1913.....                  | 100                                | (1)                                          | + 1                                                  | 102                              | — 2                                          | + 6                                                  | 102                                 | — 2                                          | + 7                                                  |
| 1914.....                  | 99                                 | + 1                                          | — 1                                                  | 108                              | — 7                                          | + 6                                                  | 107                                 | — 7                                          | + 5                                                  |
| 1915.....                  | 100                                | .....                                        | + 1                                                  | 100                              | .....                                        | — 7                                                  | 100                                 | .....                                        | — 7                                                  |
| <b>Rollers' helpers:</b>   |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                  | 99                                 | + 1                                          | .....                                                | 104                              | — 4                                          | .....                                                | 103                                 | — 3                                          | .....                                                |
| 1911.....                  | 99                                 | + 1                                          | (1)                                                  | 85                               | + 18                                         | — 18                                                 | 84                                  | + 19                                         | — 18                                                 |
| 1912.....                  | 99                                 | + 1                                          | (1)                                                  | 91                               | + 10                                         | + 7                                                  | 90                                  | + 11                                         | + 7                                                  |
| 1913.....                  | 100                                | (1)                                          | + 1                                                  | 97                               | + 3                                          | + 7                                                  | 97                                  | + 3                                          | + 8                                                  |
| 1914.....                  | 100                                | (1)                                          | (1)                                                  | 115                              | — 13                                         | + 19                                                 | 115                                 | — 13                                         | + 19                                                 |
| 1915.....                  | 100                                | .....                                        | (1)                                                  | 100                              | .....                                        | — 13                                                 | 100                                 | .....                                        | — 13                                                 |
| <b>Table lever men:</b>    |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                  | 101                                | — 1                                          | .....                                                | 102                              | — 2                                          | .....                                                | 103                                 | — 3                                          | .....                                                |
| 1911.....                  | 98                                 | + 2                                          | — 3                                                  | 95                               | + 5                                          | — 7                                                  | 95                                  | + 5                                          | — 8                                                  |
| 1912.....                  | 99                                 | + 1                                          | + 1                                                  | 96                               | + 4                                          | + 1                                                  | 97                                  | + 3                                          | + 2                                                  |
| 1913.....                  | 99                                 | + 1                                          | (1)                                                  | 102                              | — 2                                          | + 6                                                  | 101                                 | — 1                                          | + 4                                                  |
| 1914.....                  | 99                                 | + 1                                          | (1)                                                  | 89                               | + 12                                         | — 13                                                 | 89                                  | + 12                                         | — 12                                                 |
| 1915.....                  | 100                                | .....                                        | + 1                                                  | 100                              | .....                                        | + 12                                                 | 100                                 | .....                                        | + 12                                                 |
| <b>Table men:</b>          |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                  | 99                                 | + 1                                          | .....                                                | 125                              | — 20                                         | .....                                                | 124                                 | — 19                                         | .....                                                |
| 1911.....                  | 99                                 | + 1                                          | (1)                                                  | 118                              | — 15                                         | — 6                                                  | 118                                 | — 15                                         | — 5                                                  |
| 1912.....                  | 99                                 | + 1                                          | (1)                                                  | 130                              | — 23                                         | + 10                                                 | 129                                 | — 22                                         | + 9                                                  |
| 1913.....                  | 99                                 | + 1                                          | (1)                                                  | 142                              | — 30                                         | + 9                                                  | 141                                 | — 29                                         | + 9                                                  |
| 1914.....                  | 99                                 | + 1                                          | (1)                                                  | 106                              | — 6                                          | — 25                                                 | 105                                 | — 5                                          | — 26                                                 |
| 1915.....                  | 100                                | .....                                        | + 1                                                  | 100                              | .....                                        | — 6                                                  | 100                                 | .....                                        | — 5                                                  |
| <b>Guide setters:</b>      |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                  | 100                                | (1)                                          | .....                                                | 98                               | + 2                                          | .....                                                | 96                                  | + 4                                          | .....                                                |
| 1911.....                  | 98                                 | + 2                                          | — 2                                                  | 83                               | + 20                                         | — 15                                                 | 79                                  | + 27                                         | — 18                                                 |
| 1912.....                  | 99                                 | + 1                                          | + 1                                                  | 85                               | + 18                                         | + 2                                                  | 83                                  | + 20                                         | + 5                                                  |
| 1913.....                  | 100                                | (1)                                          | + 1                                                  | 97                               | + 3                                          | + 14                                                 | 96                                  | + 4                                          | + 16                                                 |
| 1914.....                  | 100                                | (1)                                          | (1)                                                  | 95                               | + 5                                          | — 2                                                  | 95                                  | + 5                                          | — 1                                                  |
| 1915.....                  | 100                                | .....                                        | (1)                                                  | 100                              | .....                                        | + 5                                                  | 100                                 | .....                                        | + 5                                                  |
| <b>Hot-saw men:</b>        |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                  | 100                                | (1)                                          | .....                                                | 95                               | + 5                                          | .....                                                | 95                                  | + 5                                          | .....                                                |
| 1911.....                  | 100                                | (1)                                          | (1)                                                  | 85                               | + 18                                         | — 11                                                 | 85                                  | + 18                                         | — 11                                                 |
| 1912.....                  | 100                                | (1)                                          | (1)                                                  | 87                               | + 15                                         | + 2                                                  | 87                                  | + 15                                         | + 2                                                  |
| 1913.....                  | 100                                | (1)                                          | (1)                                                  | 95                               | + 5                                          | + 9                                                  | 95                                  | + 5                                          | + 9                                                  |
| 1914.....                  | 100                                | (1)                                          | (1)                                                  | 97                               | + 3                                          | + 2                                                  | 97                                  | + 3                                          | + 2                                                  |
| 1915.....                  | 100                                | .....                                        | (1)                                                  | 100                              | .....                                        | + 3                                                  | 100                                 | .....                                        | + 3                                                  |

1 No change.

TABLE 32.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATIONS—STANDARD RAIL MILLS—Continued.

| Occupation and year.             | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|----------------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                                  | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in— |                                                      |
|                                  |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| <b>Hot-saw men's helpers:</b>    |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                        | 100                                | (1)                                          | .....                                                | 84                               | +19                                          | .....                                                | 83                                  | +20                                          | .....                                                |
| 1911.....                        | 99                                 | +1                                           | —1                                                   | 86                               | +16                                          | +2                                                   | 85                                  | +18                                          | +2                                                   |
| 1912.....                        | 99                                 | +1                                           | (1)                                                  | 86                               | +16                                          | (1)                                                  | 86                                  | +16                                          | +1                                                   |
| 1913.....                        | 99                                 | +1                                           | (1)                                                  | 102                              | —2                                           | +19                                                  | 102                                 | —2                                           | +19                                                  |
| 1914.....                        | 99                                 | +1                                           | (1)                                                  | 104                              | —4                                           | +2                                                   | 104                                 | —4                                           | +2                                                   |
| 1915.....                        | 100                                | .....                                        | +1                                                   | 106                              | .....                                        | —4                                                   | 100                                 | .....                                        | —4                                                   |
| <b>Hotbed lever men:</b>         |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                        | 103                                | —3                                           | .....                                                | 94                               | +6                                           | .....                                                | 97                                  | +3                                           | .....                                                |
| 1911.....                        | 100                                | (1)                                          | —3                                                   | 88                               | +14                                          | —6                                                   | 88                                  | +14                                          | —9                                                   |
| 1912.....                        | 100                                | (1)                                          | (1)                                                  | 91                               | +10                                          | +3                                                   | 91                                  | +10                                          | +3                                                   |
| 1913.....                        | 100                                | (1)                                          | (1)                                                  | 100                              | (1)                                          | +10                                                  | 99                                  | +1                                           | +3                                                   |
| 1914.....                        | 100                                | (1)                                          | (1)                                                  | 102                              | —2                                           | +2                                                   | 102                                 | —2                                           | +3                                                   |
| 1915.....                        | 100                                | .....                                        | (1)                                                  | 100                              | .....                                        | —2                                                   | 100                                 | .....                                        | —2                                                   |
| <b>Hotbed men:</b>               |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                        | 102                                | —2                                           | .....                                                | 91                               | +10                                          | .....                                                | 93                                  | +8                                           | .....                                                |
| 1911.....                        | 99                                 | +1                                           | —3                                                   | 91                               | +10                                          | (1)                                                  | 90                                  | +11                                          | —3                                                   |
| 1912.....                        | 100                                | (1)                                          | +1                                                   | 93                               | +8                                           | +2                                                   | 92                                  | +9                                           | +2                                                   |
| 1913.....                        | 100                                | (1)                                          | (1)                                                  | 107                              | —7                                           | +15                                                  | 107                                 | —7                                           | +16                                                  |
| 1914.....                        | 100                                | (1)                                          | (1)                                                  | 106                              | —6                                           | —1                                                   | 106                                 | —6                                           | —1                                                   |
| 1915.....                        | 100                                | .....                                        | (1)                                                  | 100                              | .....                                        | —6                                                   | 100                                 | .....                                        | —6                                                   |
| <b>Straighteners, gag press:</b> |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                        | 99                                 | +1                                           | .....                                                | 90                               | +11                                          | .....                                                | 86                                  | +16                                          | .....                                                |
| 1911.....                        | 95                                 | +5                                           | —4                                                   | 86                               | +16                                          | —4                                                   | 80                                  | +25                                          | —7                                                   |
| 1912.....                        | 96                                 | +4                                           | +1                                                   | 86                               | +16                                          | (1)                                                  | 83                                  | +20                                          | +4                                                   |
| 1913.....                        | 96                                 | +4                                           | (1)                                                  | 97                               | +3                                           | +13                                                  | 92                                  | +9                                           | +11                                                  |
| 1914.....                        | 96                                 | +4                                           | (1)                                                  | 93                               | —8                                           | —4                                                   | 89                                  | +12                                          | —3                                                   |
| 1915.....                        | 100                                | .....                                        | +4                                                   | 100                              | .....                                        | +8                                                   | 100                                 | .....                                        | +12                                                  |
| <b>Straighteners' helpers:</b>   |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                        | 104                                | —4                                           | .....                                                | 79                               | +27                                          | .....                                                | 84                                  | +19                                          | .....                                                |
| 1911.....                        | 101                                | —1                                           | —3                                                   | 79                               | +27                                          | (1)                                                  | 81                                  | +23                                          | —4                                                   |
| 1912.....                        | 101                                | —1                                           | (1)                                                  | 82                               | +22                                          | +4                                                   | 83                                  | +20                                          | +2                                                   |
| 1913.....                        | 100                                | (1)                                          | —1                                                   | 98                               | +2                                           | +20                                                  | 99                                  | +1                                           | +19                                                  |
| 1914.....                        | 100                                | (1)                                          | (1)                                                  | 103                              | —3                                           | +5                                                   | 104                                 | —4                                           | +5                                                   |
| 1915.....                        | 100                                | .....                                        | (1)                                                  | 100                              | .....                                        | —3                                                   | 100                                 | .....                                        | —4                                                   |
| <b>Chippers:</b>                 |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                        | 103                                | —3                                           | .....                                                | 87                               | +15                                          | .....                                                | 90                                  | +11                                          | .....                                                |
| 1911.....                        | 100                                | (1)                                          | —3                                                   | 90                               | +11                                          | +3                                                   | 90                                  | +11                                          | (1)                                                  |
| 1912.....                        | 100                                | (1)                                          | (1)                                                  | 86                               | +16                                          | —4                                                   | 86                                  | +16                                          | —4                                                   |
| 1913.....                        | 100                                | (1)                                          | (1)                                                  | 102                              | —2                                           | +19                                                  | 102                                 | —2                                           | +19                                                  |
| 1914.....                        | 100                                | (1)                                          | (1)                                                  | 90                               | +11                                          | —12                                                  | 90                                  | +11                                          | —12                                                  |
| 1915.....                        | 100                                | .....                                        | (1)                                                  | 100                              | .....                                        | +11                                                  | 100                                 | .....                                        | +11                                                  |
| <b>Drillers and punchers:</b>    |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                        | 109                                | —8                                           | .....                                                | 85                               | +18                                          | .....                                                | 93                                  | +8                                           | .....                                                |
| 1911.....                        | 100                                | (1)                                          | —8                                                   | 86                               | +16                                          | +1                                                   | 87                                  | +15                                          | —6                                                   |
| 1912.....                        | 100                                | (1)                                          | (1)                                                  | 81                               | +23                                          | —6                                                   | 82                                  | +22                                          | —6                                                   |
| 1913.....                        | 100                                | (1)                                          | (1)                                                  | 94                               | +6                                           | +16                                                  | 95                                  | +5                                           | +16                                                  |
| 1914.....                        | 100                                | (1)                                          | (1)                                                  | 90                               | +11                                          | —4                                                   | 91                                  | +10                                          | —4                                                   |
| 1915.....                        | 100                                | .....                                        | (1)                                                  | 100                              | .....                                        | +11                                                  | 100                                 | .....                                        | +10                                                  |
| <b>Cold-saw men:</b>             |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                        | 111                                | —10                                          | .....                                                | 97                               | +3                                           | .....                                                | 108                                 | —7                                           | .....                                                |
| 1911.....                        | 103                                | —3                                           | —7                                                   | 98                               | +2                                           | +1                                                   | 102                                 | —2                                           | —6                                                   |
| 1912.....                        | 103                                | —3                                           | (1)                                                  | 99                               | +1                                           | +1                                                   | 103                                 | —3                                           | +1                                                   |
| 1913.....                        | 103                                | —3                                           | (1)                                                  | 109                              | —8                                           | +10                                                  | 113                                 | —12                                          | +10                                                  |
| 1914.....                        | 97                                 | +3                                           | —6                                                   | 100                              | (1)                                          | —8                                                   | 97                                  | +3                                           | —14                                                  |
| 1915.....                        | 100                                | .....                                        | +3                                                   | 100                              | .....                                        | (1)                                                  | 100                                 | .....                                        | +3                                                   |

<sup>1</sup> No change.

TABLE 32.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATIONS—STANDARD RAIL MILLS—Concluded.

| Occupation and year.               | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|------------------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                                    | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in— |                                                      |
|                                    |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| <b>Cold-saw men's helpers:</b>     |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                          | 104                                | — 4                                          | .....                                                | 95                               | + 5                                          | .....                                                | 99                                  | + 1                                          | .....                                                |
| 1911.....                          | 99                                 | + 1                                          | —5                                                   | 95                               | + 5                                          | (1)                                                  | 95                                  | + 5                                          | — 4                                                  |
| 1912.....                          | 99                                 | + 1                                          | (1)                                                  | 96                               | + 4                                          | + 1                                                  | 95                                  | + 5                                          | (1)                                                  |
| 1913.....                          | 99                                 | + 1                                          | (1)                                                  | 107                              | — 7                                          | +11                                                  | 106                                 | — 6                                          | +12                                                  |
| 1914.....                          | 95                                 | + 5                                          | —4                                                   | 101                              | — 1                                          | — 6                                                  | 95                                  | + 5                                          | —10                                                  |
| 1915.....                          | 100                                | .....                                        | +5                                                   | 100                              | .....                                        | — 1                                                  | 100                                 | .....                                        | + 5                                                  |
| <b>Inspectors:</b>                 |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                          | 107                                | — 7                                          | .....                                                | 87                               | +15                                          | .....                                                | 93                                  | + 8                                          | .....                                                |
| 1911.....                          | 100                                | (1)                                          | —7                                                   | 90                               | +11                                          | + 3                                                  | 90                                  | +11                                          | — 3                                                  |
| 1912.....                          | 100                                | (1)                                          | (1)                                                  | 89                               | +12                                          | — 1                                                  | 90                                  | +11                                          | (1)                                                  |
| 1913.....                          | 100                                | (1)                                          | (1)                                                  | 100                              | (1)                                          | +12                                                  | 100                                 | (1)                                          | +11                                                  |
| 1914.....                          | 99                                 | + 1                                          | —1                                                   | 99                               | + 1                                          | — 1                                                  | 97                                  | + 3                                          | — 3                                                  |
| 1915.....                          | 100                                | .....                                        | +1                                                   | 100                              | .....                                        | + 1                                                  | 100                                 | .....                                        | + 3                                                  |
| <b>Laborers:</b>                   |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                          | 104                                | — 4                                          | .....                                                | 85                               | +18                                          | .....                                                | 89                                  | +12                                          | .....                                                |
| 1911.....                          | 99                                 | + 1                                          | —5                                                   | 88                               | +14                                          | + 4                                                  | 87                                  | +15                                          | — 2                                                  |
| 1912.....                          | 99                                 | + 1                                          | (1)                                                  | 88                               | +14                                          | (1)                                                  | 87                                  | +15                                          | (1)                                                  |
| 1913.....                          | 99                                 | + 1                                          | (1)                                                  | 100                              | (1)                                          | +14                                                  | 100                                 | (1)                                          | +15                                                  |
| 1914.....                          | 99                                 | + 1                                          | (1)                                                  | 102                              | — 2                                          | + 2                                                  | 100                                 | (1)                                          | (1)                                                  |
| 1915.....                          | 100                                | .....                                        | —1                                                   | 100                              | .....                                        | — 2                                                  | 100                                 | .....                                        | (1)                                                  |
| <b>Unclassified—productive:</b>    |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1914.....                          | 99                                 | + 1                                          | .....                                                | 102                              | — 2                                          | .....                                                | 101                                 | — 1                                          | .....                                                |
| 1915.....                          | 100                                | .....                                        | +1                                                   | 100                              | .....                                        | — 2                                                  | 100                                 | .....                                        | — 1                                                  |
| <b>Unclassified—nonproductive:</b> |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1914.....                          | 100                                | (1)                                          | .....                                                | 99                               | + 1                                          | .....                                                | 99                                  | + 1                                          | .....                                                |
| 1915.....                          | 100                                | .....                                        | (1)                                                  | 100                              | .....                                        | + 1                                                  | 100                                 | .....                                        | + 1                                                  |
| <b>All occupations:</b>            |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                          | 104                                | — 4                                          | .....                                                | 92                               | + 9                                          | .....                                                | 94                                  | + 6                                          | .....                                                |
| 1911.....                          | 99                                 | + 1                                          | —5                                                   | 92                               | + 9                                          | (1)                                                  | 91                                  | +10                                          | — 3                                                  |
| 1912.....                          | 100                                | (1)                                          | +1                                                   | 93                               | + 8                                          | + 1                                                  | 92                                  | + 9                                          | + 1                                                  |
| 1913.....                          | 100                                | (1)                                          | (1)                                                  | 103                              | — 3                                          | +11                                                  | 103                                 | — 3                                          | +12                                                  |
| 1914.....                          | 99                                 | + 1                                          | —1                                                   | 102                              | — 2                                          | — 1                                                  | 102                                 | — 2                                          | — 1                                                  |
| 1915.....                          | 100                                | .....                                        | +1                                                   | 100                              | .....                                        | — 2                                                  | 100                                 | .....                                        | — 2                                                  |

1 No change.

The relative full-time weekly earnings of the department as a whole ("all occupations") in 1910 were 94 as compared with 100 in 1915. In other words, the full-time weekly earnings in 1910 were 94 per cent of such earnings in 1915. The relative decreased to 91 in 1911, advanced to 92 in 1912, to 103 in 1913, decreased to 102 in 1914 and in 1915 the base year, the relative was 100. These relative numbers for each year previous to 1914 are based on a combination of the principal productive occupations only, but for 1914 and 1915 they are computed on data for all employees in the department including the unclassified groups (see pages 55 and 56) tabulated for 1914 and 1915 for the first time.

## FULL-TIME WORKING DAYS PER WEEK.

The number and per cent of employees in the principal productive occupations in standard rail mills, whose customary working time per week was 6 days or turns, or 7 days, or variations thereof, are shown in Table 33. The heading "6 days and 7 days alternately" indicates that the plants were not in operation half a day each week; the employees reported working 6 turns one week and 7 turns the next week. The figures are presented for each of the two districts for which standard-rail-mill data were obtained, and for the two districts combined.

Two sets of figures are shown for the 7 plants reported for 1914 and 1915, the first covering only the principal productive occupations as shown for all the preceding groups of years and therefore strictly comparable with them, and the second including the unclassified occupations (see pp. 55 and 56) tabulated for 1914 and 1915 for the first time.

TABLE 33.—NUMBER AND PER CENT OF EMPLOYEES IN EACH DISTRICT WORKING EACH SPECIFIED NUMBER OF DAYS PER WEEK, BY YEARS, 1910 TO 1915—STANDARD RAIL MILLS.

[The figures for each group of years are for identical plants.]

| District, and number of plants. | Year. | Number of employees. | Number of employees whose customary working time per week was— |                                         |         |                                |                                         | Per cent of employees whose customary working time per week was— |                                |                                         |         |                                |                                         |
|---------------------------------|-------|----------------------|----------------------------------------------------------------|-----------------------------------------|---------|--------------------------------|-----------------------------------------|------------------------------------------------------------------|--------------------------------|-----------------------------------------|---------|--------------------------------|-----------------------------------------|
|                                 |       |                      | 5 days and 6 days alternately.                                 | 5 days, 6 days, and 6 days in rotation. | 6 days. | 6 days and 7 days alternately. | 6 days, 6 days, and 7 days in rotation. | 7 days.                                                          | 5 days and 6 days alternately. | 5 days, 6 days, and 6 days in rotation. | 6 days. | 6 days and 7 days alternately. | 6 days, 6 days, and 7 days in rotation. |
| Eastern:                        |       |                      |                                                                |                                         |         |                                |                                         |                                                                  |                                |                                         |         |                                |                                         |
| 1 plant.....                    | 1913  | 199                  | .....                                                          | .....                                   | 199     | .....                          | .....                                   | .....                                                            | .....                          | 100                                     | .....   | .....                          | .....                                   |
|                                 | 1914  | 195                  | .....                                                          | .....                                   | 195     | .....                          | .....                                   | .....                                                            | .....                          | 100                                     | .....   | .....                          | .....                                   |
| 2 plants.....                   | 1914  | 303                  | 88                                                             | 9                                       | 206     | .....                          | .....                                   | 29                                                               | 3                              | 68                                      | .....   | .....                          | .....                                   |
|                                 | 1915  | 322                  | 69                                                             | 18                                      | 235     | .....                          | .....                                   | 21                                                               | 6                              | 73                                      | .....   | .....                          | .....                                   |
| 2 plants.....                   | 1914  | 430                  | 117                                                            | 9                                       | 298     | .....                          | 6                                       | 27                                                               | 2                              | 69                                      | .....   | .....                          | 1                                       |
|                                 | 1915  | 481                  | 89                                                             | 18                                      | 368     | .....                          | 6                                       | 19                                                               | 4                              | 77                                      | .....   | .....                          | 1                                       |
| Pittsburgh:                     |       |                      |                                                                |                                         |         |                                |                                         |                                                                  |                                |                                         |         |                                |                                         |
| 2 plants.....                   | 1910  | 374                  | .....                                                          | .....                                   | 312     | .....                          | 62                                      | .....                                                            | .....                          | 83                                      | .....   | .....                          | 17                                      |
|                                 | 1911  | 348                  | .....                                                          | .....                                   | 332     | 10                             | 6                                       | .....                                                            | .....                          | 95                                      | 3       | .....                          | 2                                       |
| 3 plants.....                   | 1911  | 447                  | .....                                                          | .....                                   | 430     | 10                             | 7                                       | .....                                                            | .....                          | 96                                      | 2       | .....                          | 2                                       |
|                                 | 1912  | 431                  | .....                                                          | .....                                   | 412     | 12                             | 7                                       | .....                                                            | .....                          | 96                                      | 3       | .....                          | 2                                       |
| 3 plants.....                   | 1912  | 495                  | .....                                                          | .....                                   | 467     | 8                              | 20                                      | .....                                                            | .....                          | 94                                      | 2       | .....                          | 4                                       |
|                                 | 1913  | 507                  | .....                                                          | .....                                   | 473     | 13                             | 21                                      | .....                                                            | .....                          | 93                                      | 3       | .....                          | 4                                       |
| 2 plants.....                   | 1913  | 382                  | .....                                                          | .....                                   | 350     | 10                             | 22                                      | .....                                                            | .....                          | 92                                      | 3       | .....                          | 6                                       |
|                                 | 1914  | 350                  | .....                                                          | .....                                   | 345     | .....                          | 5                                       | .....                                                            | .....                          | 99                                      | .....   | .....                          | 1                                       |
| 2 plants.....                   | 1914  | 356                  | .....                                                          | .....                                   | 351     | .....                          | 5                                       | .....                                                            | .....                          | 99                                      | .....   | .....                          | 1                                       |
|                                 | 1915  | 452                  | .....                                                          | .....                                   | 427     | 6                              | 19                                      | .....                                                            | .....                          | 94                                      | 1       | .....                          | 4                                       |
| 2 plants.....                   | 1914  | 548                  | .....                                                          | .....                                   | 503     | 14                             | 31                                      | .....                                                            | .....                          | 92                                      | 3       | .....                          | 6                                       |
|                                 | 1915  | 656                  | .....                                                          | .....                                   | 567     | 14                             | 75                                      | .....                                                            | .....                          | 86                                      | 2       | .....                          | 11                                      |

TABLE 33.—NUMBER AND PER CENT OF EMPLOYEES IN EACH DISTRICT WORKING EACH SPECIFIED NUMBER OF DAYS PER WEEK, BY YEARS, 1910 TO 1915—STANDARD RAIL MILLS—Concluded.

| District, and number of plants.               | Year. | Number of employees. | Number of employees whose customary working time per week was— |                                         |         |                                |                                         | Per cent of employees whose customary working time per week was— |                                |                                         |         |                                |                                         |         |
|-----------------------------------------------|-------|----------------------|----------------------------------------------------------------|-----------------------------------------|---------|--------------------------------|-----------------------------------------|------------------------------------------------------------------|--------------------------------|-----------------------------------------|---------|--------------------------------|-----------------------------------------|---------|
|                                               |       |                      | 5 days and 6 days alternately.                                 | 5 days, 6 days, and 6 days in rotation. | 6 days. | 6 days and 7 days alternately. | 6 days, 6 days, and 7 days in rotation. | 7 days.                                                          | 5 days and 6 days alternately. | 5 days, 6 days, and 6 days in rotation. | 6 days. | 6 days and 7 days alternately. | 6 days, 6 days, and 7 days in rotation. | 7 days. |
| Great Lakes and Middle West:<br>4 plants..... | 1910  | 1,161                | .....                                                          | .....                                   | 727     | 8                              | 27                                      | 399                                                              | .....                          | .....                                   | 63      | 1                              | 2                                       | 34      |
|                                               | 1911  | 904                  | .....                                                          | .....                                   | 792     | 52                             | 27                                      | 33                                                               | .....                          | .....                                   | 88      | 6                              | 3                                       | 4       |
| 4 plants.....                                 | 1911  | 908                  | .....                                                          | .....                                   | 796     | 52                             | 27                                      | 33                                                               | .....                          | .....                                   | 88      | 6                              | 3                                       | 4       |
|                                               | 1912  | 1,026                | .....                                                          | .....                                   | 900     | 76                             | 27                                      | 23                                                               | .....                          | .....                                   | 88      | 7                              | 3                                       | 2       |
| 4 plants.....                                 | 1912  | 940                  | .....                                                          | .....                                   | 926     | 6                              | .....                                   | 8                                                                | .....                          | .....                                   | 99      | 1                              | .....                                   | 1       |
|                                               | 1913  | 920                  | .....                                                          | .....                                   | 904     | 6                              | 3                                       | 7                                                                | .....                          | .....                                   | 98      | 1                              | (1)                                     | 1       |
| 3 plants.....                                 | 1913  | 556                  | .....                                                          | .....                                   | 532     | 2                              | 21                                      | 1                                                                | .....                          | .....                                   | 96      | (1)                            | 4                                       | (1)     |
|                                               | 1914  | 398                  | .....                                                          | .....                                   | 398     | .....                          | .....                                   | .....                                                            | .....                          | .....                                   | 100     | .....                          | .....                                   | .....   |
| 3 plants.....                                 | 1914  | 398                  | .....                                                          | .....                                   | 398     | .....                          | .....                                   | .....                                                            | .....                          | .....                                   | 100     | .....                          | .....                                   | .....   |
|                                               | 1915  | 420                  | .....                                                          | .....                                   | 420     | .....                          | .....                                   | .....                                                            | .....                          | .....                                   | 100     | .....                          | .....                                   | .....   |
| 3 plants.....                                 | 1914  | 747                  | .....                                                          | .....                                   | 718     | .....                          | .....                                   | 29                                                               | .....                          | .....                                   | 96      | .....                          | .....                                   | 4       |
|                                               | 1915  | 808                  | .....                                                          | .....                                   | 779     | 8                              | .....                                   | 21                                                               | .....                          | .....                                   | 96      | 1                              | .....                                   | 3       |
| Total:<br>6 plants.....                       | 1910  | 1,535                | .....                                                          | .....                                   | 1,039   | 8                              | 27                                      | 461                                                              | .....                          | .....                                   | 68      | 1                              | 2                                       | 30      |
|                                               | 1911  | 1,252                | .....                                                          | .....                                   | 1,124   | 62                             | 27                                      | 39                                                               | .....                          | .....                                   | 90      | 5                              | 2                                       | 3       |
| 7 plants.....                                 | 1911  | 1,355                | .....                                                          | .....                                   | 1,226   | 62                             | 27                                      | 40                                                               | .....                          | .....                                   | 91      | 5                              | 2                                       | 3       |
|                                               | 1912  | 1,457                | .....                                                          | .....                                   | 1,312   | 88                             | 27                                      | 30                                                               | .....                          | .....                                   | 90      | 6                              | 2                                       | 2       |
| 7 plants.....                                 | 1912  | 1,435                | .....                                                          | .....                                   | 1,393   | 14                             | .....                                   | 28                                                               | .....                          | .....                                   | 97      | 1                              | .....                                   | 2       |
|                                               | 1913  | 1,427                | .....                                                          | .....                                   | 1,377   | 19                             | 3                                       | 28                                                               | .....                          | .....                                   | 97      | 1                              | (1)                                     | 2       |
| 6 plants.....                                 | 1913  | 1,137                | .....                                                          | .....                                   | 1,081   | 12                             | 21                                      | 23                                                               | .....                          | .....                                   | 95      | 1                              | 2                                       | 2       |
|                                               | 1914  | 943                  | .....                                                          | .....                                   | 938     | .....                          | .....                                   | 5                                                                | .....                          | .....                                   | 99      | .....                          | .....                                   | 1       |
| 7 plants.....                                 | 1914  | 1,057                | 88                                                             | 9                                       | 955     | .....                          | .....                                   | 5                                                                | 8                              | 1                                       | 90      | .....                          | .....                                   | 1       |
|                                               | 1915  | 1,194                | 69                                                             | 18                                      | 1,082   | 6                              | .....                                   | 19                                                               | 6                              | 2                                       | 91      | 1                              | .....                                   | 2       |
| 7 plants.....                                 | 1914  | 1,725                | 117                                                            | 9                                       | 1,519   | 14                             | .....                                   | 66                                                               | 7                              | 1                                       | 88      | 1                              | .....                                   | 4       |
|                                               | 1915  | 1,945                | 89                                                             | 18                                      | 1,714   | 22                             | .....                                   | 102                                                              | 5                              | 1                                       | 88      | 1                              | .....                                   | 5       |

<sup>1</sup> Less than one-half of 1 per cent.

Two general tables are presented for the standard-rail-mill department, as follows:

TABLE M.—Full-time hours per week, rates of wages per hour, and full-time weekly earnings, in the United States, by years, 1910 to 1915.

TABLE N.—Full-time hours per week, rates of wages per hour, and full-time weekly earnings, in each district, by years, 1913 to 1915.

The data from Table M are summarized in Table 31, percentages being used instead of the actual figures for classified hours and rates of wages.



The order in which the occupations are given in Tables M and N and in the table of relative numbers follows that of the processes of manufacture. "Identical plants," as used in the tables of this report, are identical units of identical establishments, reporting the same occupations in each of two or more consecutive years. For a more extended explanation see page 58.

Figures for each geographical division for each preceding year back to 1910, corresponding to those given for 1913, 1914, and 1915, in Table N, were given in Bulletins 151 and 168 of this bureau.

Descriptions of the occupations which are specified in the tables of this chapter and of other occupations of this department in the unclassified groups appear in the Glossary of Occupations, pages 498 to 501.

TABLE M.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER BY YEARS, 1910 TO 1915—

[The figures for each group of

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |                      |                      |    |    |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----------------------|----------------------|----|----|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | Over 60 and under 72 | Over 72 and under 84 | 84 |    |
|          | Charging-machine operators:       |       |                      |                                   |                                 |                                    |                                                |                      |                 |                      |                      |    |    |
| 1        | 3 plants.....                     | 1910  | 22                   | 72.0                              | \$0.234                         | \$16.87                            |                                                |                      |                 |                      | 22                   |    |    |
| 2        |                                   | 1911  | 22                   | 72.0                              | .232                            | 16.72                              |                                                |                      |                 |                      | 22                   |    |    |
| 3        |                                   | 1912  | 22                   | 72.0                              | .244                            | 17.58                              |                                                |                      |                 |                      | 22                   |    |    |
| 4        | 2 plants.....                     | 1912  | 14                   | 72.0                              | .284                            | 20.43                              |                                                |                      |                 |                      | 14                   |    |    |
| 5        |                                   | 1913  | 14                   | 72.0                              | .321                            | 23.12                              |                                                |                      |                 |                      | 14                   |    |    |
| 6        | 3 plants.....                     | 1913  | 22                   | 72.0                              | .255                            | 18.39                              |                                                |                      |                 |                      | 22                   |    |    |
| 7        |                                   | 1914  | 22                   | 72.0                              | .280                            | 20.17                              |                                                |                      |                 |                      | 22                   |    |    |
| 8        |                                   | 1915  | 22                   | 72.0                              | .226                            | 16.27                              |                                                |                      |                 |                      | 22                   |    |    |
| 9        | Reheaters:                        |       |                      |                                   |                                 |                                    |                                                |                      |                 |                      |                      |    |    |
| 10       | 4 plants.....                     | 1910  | 23                   | 72.0                              | .429                            | 31.00                              |                                                |                      |                 |                      | 21                   | 2  |    |
| 11       |                                   | 1911  | 23                   | 72.0                              | .421                            | 30.28                              |                                                |                      |                 |                      | 23                   |    |    |
| 12       |                                   | 1912  | 23                   | 72.0                              | .410                            | 29.50                              |                                                |                      |                 |                      | 23                   |    |    |
| 13       | 3 plants.....                     | 1912  | 13                   | 72.0                              | .531                            | 38.23                              |                                                |                      |                 |                      | 13                   |    |    |
| 14       |                                   | 1913  | 13                   | 72.0                              | .586                            | 42.23                              |                                                |                      |                 |                      | 13                   |    |    |
| 15       | 3 plants.....                     | 1913  | 14                   | 72.0                              | .382                            | 27.53                              |                                                |                      |                 |                      | 14                   |    |    |
| 16       |                                   | 1914  | 14                   | 72.0                              | .336                            | 24.18                              |                                                |                      |                 |                      | 14                   |    |    |
| 17       |                                   | 1915  | 12                   | 72.0                              | .385                            | 27.70                              |                                                |                      |                 |                      | 12                   |    |    |
| 18       | Reheaters' helpers:               |       |                      |                                   |                                 |                                    |                                                |                      |                 |                      |                      |    |    |
| 19       | 3 plants.....                     | 1910  | 24                   | 71.3                              | .280                            | 19.95                              |                                                |                      |                 | 12                   | 12                   |    |    |
| 20       |                                   | 1911  | 24                   | 72.0                              | .264                            | 18.98                              |                                                |                      |                 |                      | 24                   |    |    |
| 21       |                                   | 1912  | 24                   | 72.0                              | .304                            | 21.87                              |                                                |                      |                 |                      | 24                   |    |    |
| 22       |                                   | 1913  | 23                   | 72.0                              | .345                            | 24.87                              |                                                |                      |                 |                      | 23                   |    |    |
| 23       | 2 plants.....                     | 1913  | 22                   | 72.0                              | .324                            | 23.30                              |                                                |                      |                 |                      | 22                   |    |    |
| 24       |                                   | 1914  | 20                   | 72.0                              | .354                            | 25.49                              |                                                |                      |                 |                      | 20                   |    |    |
| 25       |                                   | 1915  | 20                   | 72.0                              | .254                            | 18.27                              |                                                |                      |                 |                      | 20                   |    |    |
| 26       | Roll engineers:                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |                      |                      |    |    |
| 27       | 6 plants.....                     | 1910  | 42                   | 77.4                              | .310                            | 24.30                              |                                                |                      |                 |                      | 20                   | 6  | 16 |
| 28       |                                   | 1911  | 37                   | 76.2                              | .282                            | 21.67                              |                                                |                      |                 |                      | 18                   | 12 | 7  |
| 29       | 7 plants.....                     | 1911  | 43                   | 75.8                              | .277                            | 21.14                              |                                                |                      |                 |                      | 18                   | 18 | 7  |
| 30       |                                   | 1912  | 48                   | 74.1                              | .304                            | 22.44                              |                                                |                      |                 |                      | 28                   | 18 | 2  |
| 31       | 7 plants.....                     | 1912  | 32                   | 75.2                              | .307                            | 22.95                              |                                                |                      |                 |                      | 14                   | 14 | 4  |
| 32       |                                   | 1913  | 32                   | 74.9                              | .323                            | 24.16                              |                                                |                      |                 |                      | 20                   | 8  | 4  |
| 33       | 6 plants.....                     | 1913  | 28                   | 74.9                              | .287                            | 21.48                              |                                                |                      |                 |                      | 18                   | 6  | 4  |
| 34       |                                   | 1914  | 28                   | 73.7                              | .301                            | 22.22                              |                                                |                      |                 |                      | 24                   |    | 4  |
| 35       | 7 plants.....                     | 1914  | 32                   | 73.5                              | .317                            | 23.33                              |                                                |                      |                 |                      | 28                   |    | 4  |
| 36       |                                   | 1915  | 30                   | 72.5                              | .322                            | 23.30                              |                                                |                      |                 |                      | 24                   | 6  |    |
| 37       | Rollers:                          |       |                      |                                   |                                 |                                    |                                                |                      |                 |                      |                      |    |    |
| 38       | 5 plants.....                     | 1910  | 12                   | 72.3                              | .624                            | 45.09                              |                                                |                      |                 |                      | 10                   | 2  |    |
| 39       |                                   | 1911  | 12                   | 72.3                              | .614                            | 44.40                              |                                                |                      |                 |                      | 10                   | 2  |    |
| 40       | 6 plants.....                     | 1911  | 14                   | 72.2                              | .591                            | 42.67                              |                                                |                      |                 |                      | 12                   | 2  |    |
| 41       |                                   | 1912  | 14                   | 72.2                              | .646                            | 46.65                              |                                                |                      |                 |                      | 12                   | 2  |    |
| 42       |                                   | 1913  | 14                   | 72.6                              | .690                            | 50.18                              |                                                |                      |                 |                      | 11                   | 3  |    |
| 43       | 5 plants.....                     | 1913  | 12                   | 72.3                              | .622                            | 44.95                              |                                                |                      |                 |                      | 10                   | 2  |    |
| 44       |                                   | 1914  | 12                   | 72.0                              | .655                            | 47.18                              |                                                |                      |                 |                      | 12                   |    |    |
| 45       | 6 plants.....                     | 1914  | 14                   | 71.1                              | .649                            | 46.16                              |                                                |                      |                 | 2                    | 12                   |    |    |
| 46       |                                   | 1915  | 13                   | 71.5                              | .603                            | 43.09                              |                                                |                      |                 | 1                    | 12                   |    |    |
| 47       | Rollers' helpers:                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |                      |                      |    |    |
| 48       | 1 plant.....                      | 1910  | 3                    | 72.0                              | .561                            | 40.39                              |                                                |                      |                 |                      | 3                    |    |    |
| 49       |                                   | 1911  | 1                    | 72.0                              | .458                            | 32.98                              |                                                |                      |                 |                      | 1                    |    |    |
| 50       | 2 plants.....                     | 1911  | 3                    | 72.7                              | .284                            | 20.56                              |                                                |                      |                 |                      | 1                    | 2  |    |
| 51       |                                   | 1912  | 6                    | 72.6                              | .304                            | 21.98                              |                                                |                      |                 |                      | 2                    | 4  |    |
|          |                                   | 1913  | 6                    | 73.3                              | .323                            | 23.61                              |                                                |                      |                 |                      | 3                    | 3  |    |
|          | 1 plant.....                      | 1913  | 2                    | 72.0                              | .396                            | 28.51                              |                                                |                      |                 |                      | 2                    |    |    |
|          |                                   | 1914  | 2                    | 72.0                              | .470                            | 33.80                              |                                                |                      |                 |                      | 2                    |    |    |
|          | 2 plants.....                     | 1914  | 4                    | 72.0                              | .468                            | 33.66                              |                                                |                      |                 |                      | 4                    |    |    |
|          |                                   | 1915  | 4                    | 72.0                              | .407                            | 29.30                              |                                                |                      |                 |                      | 4                    |    |    |

# HOUR, AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, *STANDARD RAIL MILLS.*

years are for identical plants.]

| Employees whose rates of wages per hour were— |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | Line No. |
|-----------------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-------------------|----------|
| 10 and under 12 cts.                          | 12 and under 14 cts. | 14 and under 16 cts. | 16 and under 18 cts. | 18 and under 20 cts. | 20 and under 25 cts. | 25 and under 30 cts. | 30 and under 40 cts. | 40 and under 50 cts. | 50 and under 60 cts. | 60 and under 70 cts. | 70 cts. and over. |          |
|                                               |                      |                      | 8                    |                      | 6                    |                      | 8                    |                      |                      |                      |                   | 1        |
|                                               |                      |                      | 8                    |                      | 6                    | 8                    |                      |                      |                      |                      |                   | 2        |
|                                               |                      |                      | 8                    |                      |                      | 10                   | 4                    |                      |                      |                      |                   | 3        |
|                                               |                      |                      |                      |                      |                      | 10                   | 4                    |                      |                      |                      |                   | 4        |
|                                               |                      |                      |                      |                      |                      | 14                   | 14                   |                      |                      |                      |                   | 5        |
|                                               |                      |                      |                      |                      | 14                   |                      | 8                    |                      |                      |                      |                   | 6        |
|                                               |                      |                      |                      |                      | 8                    | 6                    | 8                    |                      |                      |                      |                   | 7        |
|                                               |                      |                      |                      |                      | 22                   |                      |                      |                      |                      |                      |                   | 8        |
|                                               |                      |                      |                      |                      |                      | 1                    |                      | 22                   |                      |                      |                   | 9        |
|                                               |                      |                      |                      |                      |                      | 1                    | 10                   | 12                   |                      |                      |                   | 10       |
|                                               |                      |                      |                      |                      |                      | 11                   | 1                    | 1                    | 10                   |                      |                   | 11       |
|                                               |                      |                      |                      |                      |                      | 1                    | 1                    | 1                    | 10                   |                      |                   | 12       |
|                                               |                      |                      |                      |                      |                      |                      | 1                    | 2                    |                      | 10                   |                   | 13       |
|                                               |                      |                      |                      |                      |                      |                      | 10                   | 4                    |                      |                      |                   | 14       |
|                                               |                      |                      |                      |                      |                      | 5                    | 7                    | 1                    | 1                    |                      |                   | 15       |
|                                               |                      |                      |                      |                      |                      |                      | 4                    | 8                    |                      |                      |                   | 16       |
|                                               |                      |                      |                      | 1                    | 11                   |                      | 12                   |                      |                      |                      |                   | 17       |
|                                               |                      |                      |                      | 1                    | 6                    | 17                   |                      |                      |                      |                      |                   | 18       |
|                                               |                      |                      |                      | 1                    | 1                    | 11                   | 11                   |                      |                      |                      |                   | 19       |
|                                               |                      |                      |                      |                      | 1                    |                      | 22                   |                      |                      |                      |                   | 20       |
|                                               |                      |                      |                      |                      |                      | 10                   | 12                   |                      |                      |                      |                   | 21       |
|                                               |                      |                      |                      |                      |                      |                      | 15                   | 5                    |                      |                      |                   | 22       |
|                                               |                      |                      |                      |                      | 9                    | 11                   |                      |                      |                      |                      |                   | 23       |
|                                               |                      |                      |                      |                      |                      | 16                   | 10                   | 6                    |                      |                      |                   | 24       |
|                                               |                      |                      |                      |                      | 16                   | 10                   | 9                    | 10                   | 2                    |                      |                   | 25       |
|                                               |                      |                      |                      |                      |                      | 20                   | 12                   | 9                    | 2                    |                      |                   | 26       |
|                                               |                      |                      |                      |                      | 13                   | 19                   | 12                   | 4                    |                      |                      |                   | 27       |
|                                               |                      |                      |                      |                      | 12                   | 8                    | 8                    | 4                    |                      |                      |                   | 28       |
|                                               |                      |                      |                      |                      |                      | 16                   | 12                   |                      | 4                    |                      |                   | 29       |
|                                               |                      |                      |                      |                      | 4                    | 12                   | 12                   |                      |                      |                      |                   | 30       |
|                                               |                      |                      |                      |                      | 4                    | 10                   | 12                   | 2                    |                      |                      |                   | 31       |
|                                               |                      |                      |                      |                      | 4                    | 10                   | 12                   | 6                    |                      |                      |                   | 32       |
|                                               |                      |                      |                      |                      | 4                    | 10                   | 10                   | 4                    | 2                    |                      |                   | 33       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      | 4                    | 8                    |                   | 34       |
|                                               |                      |                      |                      |                      |                      |                      |                      | 1                    | 3                    | 7                    |                   | 35       |
|                                               |                      |                      |                      |                      |                      |                      |                      | 3                    | 3                    | 7                    | 1                 | 36       |
|                                               |                      |                      |                      |                      |                      |                      |                      | 1                    | 1                    | 9                    | 3                 | 37       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      |                      | 10                   | 4                 | 38       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      | 2                    | 10                   |                   | 39       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      | 2                    | 8                    | 2                 | 40       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      | 2                    | 10                   | 2                 | 41       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      | 4                    | 9                    |                   | 42       |
|                                               |                      |                      |                      |                      |                      |                      |                      |                      | 3                    |                      |                   | 43       |
|                                               |                      |                      |                      |                      |                      |                      |                      | 1                    |                      |                      |                   | 44       |
|                                               |                      |                      |                      | 2                    |                      |                      |                      | 1                    |                      |                      |                   | 45       |
|                                               |                      |                      |                      |                      | 4                    |                      |                      | 2                    |                      |                      |                   | 46       |
|                                               |                      |                      |                      |                      |                      | 4                    | 2                    |                      |                      |                      |                   | 47       |
|                                               |                      |                      |                      |                      |                      |                      | 2                    |                      |                      |                      |                   | 48       |
|                                               |                      |                      |                      |                      |                      |                      |                      | 1                    | 1                    |                      |                   | 49       |
|                                               |                      |                      |                      |                      |                      |                      |                      | 3                    | 1                    |                      |                   | 50       |
|                                               |                      |                      |                      |                      |                      |                      | 2                    | 1                    | 1                    |                      |                   | 51       |

TABLE M.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER BY YEARS, 1910 TO 1915—

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 |
| 1        | Table lever men:                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 2        | 6 plants.....                     | 1910  | 74                   | 65.5                              | \$0.454                         | \$28.25                            |                                                | 24                   |                 |    |                      | 44 | 6                    |
| 3        |                                   | 1911  | 69                   | 64.0                              | .422                            | 26.08                              |                                                | 24                   |                 |    |                      | 45 |                      |
| 4        |                                   | 1912  | 74                   | 64.5                              | .427                            | 26.82                              |                                                | 24                   |                 |    |                      | 50 |                      |
| 5        | 6 plants.....                     | 1912  | 80                   | 67.1                              | .392                            | 26.52                              |                                                | 18                   |                 |    |                      | 60 | 2                    |
| 6        |                                   | 1913  | 80                   | 67.1                              | .416                            | 27.51                              |                                                | 18                   |                 |    |                      | 60 | 2                    |
| 7        | 6 plants.....                     | 1913  | 52                   | 64.0                              | .377                            | 23.28                              |                                                | 18                   |                 |    |                      | 34 |                      |
| 8        |                                   | 1914  | 52                   | 63.7                              | .328                            | 20.61                              | 18                                             |                      |                 |    |                      | 34 |                      |
| 9        | 7 plants.....                     | 1914  | 62                   | 64.0                              | .324                            | 20.49                              | 18                                             |                      |                 | 10 |                      | 34 |                      |
| 10       |                                   | 1915  | 53                   | 65.0                              | .366                            | 22.92                              | 14                                             |                      |                 | 5  |                      | 34 |                      |
| 11       | Table men:                        |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 12       | 4 plants.....                     | 1910  | 26                   | 72.0                              | .279                            | 20.06                              |                                                |                      |                 |    |                      | 26 |                      |
| 13       |                                   | 1911  | 26                   | 72.0                              | .264                            | 19.00                              |                                                |                      |                 |    |                      | 26 |                      |
| 14       | 5 plants.....                     | 1911  | 27                   | 72.4                              | .262                            | 18.97                              |                                                |                      |                 |    |                      | 26 | 1                    |
| 15       |                                   | 1912  | 25                   | 72.5                              | .287                            | 20.77                              |                                                |                      |                 |    |                      | 24 | 1                    |
| 16       | 5 plants.....                     | 1912  | 30                   | 72.0                              | .324                            | 23.32                              |                                                |                      |                 |    |                      | 30 |                      |
| 17       |                                   | 1913  | 30                   | 72.0                              | .354                            | 25.47                              |                                                |                      |                 |    |                      | 30 |                      |
| 18       | 3 plants.....                     | 1913  | 28                   | 72.0                              | .437                            | 31.49                              |                                                |                      |                 |    |                      | 28 |                      |
| 19       |                                   | 1914  | 24                   | 72.0                              | .327                            | 23.57                              |                                                |                      |                 |    |                      | 24 |                      |
| 20       | 4 plants.....                     | 1914  | 32                   | 70.4                              | .356                            | 24.92                              |                                                |                      |                 | 8  |                      | 24 |                      |
| 21       |                                   | 1915  | 28                   | 71.1                              | .336                            | 23.68                              |                                                |                      |                 | 4  |                      | 24 |                      |
| 22       | Guide setters:                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 23       | 5 plants.....                     | 1910  | 20                   | 66.8                              | .440                            | 29.26                              |                                                | 3                    |                 | 3  |                      | 14 |                      |
| 24       |                                   | 1911  | 17                   | 65.8                              | .373                            | 24.31                              |                                                | 3                    |                 | 3  |                      | 11 |                      |
| 25       | 7 plants.....                     | 1911  | 27                   | 66.8                              | .336                            | 22.20                              |                                                | 3                    |                 | 6  | 1                    | 11 | 6                    |
| 26       |                                   | 1912  | 30                   | 67.3                              | .346                            | 23.14                              |                                                | 3                    |                 | 6  | 1                    | 14 | 6                    |
| 27       | 4 plants.....                     | 1912  | 17                   | 68.3                              | .340                            | 22.61                              |                                                | 3                    |                 |    |                      | 8  | 6                    |
| 28       |                                   | 1913  | 17                   | 69.2                              | .384                            | 26.20                              |                                                | 3                    |                 |    |                      | 8  | 6                    |
| 29       | 4 plants.....                     | 1913  | 17                   | 67.9                              | .394                            | 26.49                              |                                                | 3                    |                 |    |                      | 14 |                      |
| 30       |                                   | 1914  | 17                   | 67.8                              | .386                            | 26.31                              | 3                                              |                      |                 |    |                      | 14 |                      |
| 31       | 5 plants.....                     | 1914  | 21                   | 68.6                              | .394                            | 27.11                              | 3                                              |                      |                 |    |                      | 18 |                      |
| 32       |                                   | 1915  | 21                   | 68.6                              | .417                            | 28.45                              | 3                                              |                      |                 |    |                      | 18 |                      |
| 33       | Hot-saw men:                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 34       | 6 plants.....                     | 1910  | 19                   | 72.0                              | .289                            | 20.79                              |                                                |                      |                 |    |                      | 19 |                      |
| 35       |                                   | 1911  | 14                   | 72.0                              | .258                            | 18.56                              |                                                |                      |                 |    |                      | 14 |                      |
| 36       | 7 plants.....                     | 1911  | 16                   | 72.0                              | .251                            | 18.10                              |                                                |                      |                 |    |                      | 16 |                      |
| 37       |                                   | 1912  | 18                   | 72.0                              | .257                            | 18.52                              |                                                |                      |                 |    |                      | 18 |                      |
| 38       | 7 plants.....                     | 1912  | 20                   | 72.0                              | .260                            | 18.69                              |                                                |                      |                 |    |                      | 20 |                      |
| 39       |                                   | 1913  | 20                   | 72.0                              | .283                            | 20.36                              |                                                |                      |                 |    |                      | 20 |                      |
| 40       | 6 plants.....                     | 1913  | 16                   | 72.0                              | .259                            | 18.67                              |                                                |                      |                 |    |                      | 16 |                      |
| 41       |                                   | 1914  | 16                   | 72.0                              | .265                            | 19.08                              |                                                |                      |                 |    |                      | 16 |                      |
| 42       | 7 plants.....                     | 1914  | 17                   | 71.6                              | .263                            | 18.86                              |                                                |                      |                 | 1  |                      | 16 |                      |
| 43       |                                   | 1915  | 17                   | 71.6                              | .272                            | 19.52                              |                                                |                      |                 | 1  |                      | 16 |                      |
| 44       | Hot-saw men's helpers:            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 45       | 6 plants.....                     | 1910  | 64                   | 72.4                              | .165                            | 11.92                              |                                                |                      |                 |    |                      | 62 | 2                    |
| 46       |                                   | 1911  | 59                   | 72.1                              | .168                            | 12.14                              |                                                |                      |                 |    |                      | 51 | 8                    |
| 47       | 7 plants.....                     | 1911  | 66                   | 72.1                              | .168                            | 12.10                              |                                                |                      |                 |    |                      | 58 | 8                    |
| 48       |                                   | 1912  | 73                   | 72.1                              | .169                            | 12.20                              |                                                |                      |                 |    |                      | 65 | 8                    |
| 49       | 7 plants.....                     | 1912  | 55                   | 72.1                              | .170                            | 12.24                              |                                                |                      |                 |    |                      | 47 | 8                    |
| 50       |                                   | 1913  | 59                   | 72.1                              | .201                            | 14.52                              |                                                |                      |                 |    |                      | 51 | 8                    |
| 51       | 6 plants.....                     | 1913  | 60                   | 72.1                              | .197                            | 14.16                              |                                                |                      |                 |    |                      | 52 | 8                    |
| 52       |                                   | 1914  | 50                   | 72.0                              | .201                            | 14.47                              |                                                |                      |                 |    |                      | 50 |                      |
| 53       | 7 plants.....                     | 1914  | 56                   | 71.3                              | .197                            | 14.08                              |                                                |                      |                 | 6  |                      | 50 |                      |
| 54       |                                   | 1915  | 61                   | 71.8                              | .189                            | 13.56                              |                                                |                      |                 | 3  |                      | 50 | 8                    |

HOURLY AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES,  
STANDARD RAIL MILLS—Continued.

| Employees whose rates of wages per hour were— |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 10<br>and<br>under<br>12<br>cts.              | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                  |                                  |                                  |                                  | 2                                | 2                                | 32                               | 20                               |                                  | 12                               | 6                          | 1           |
|                                               |                                  |                                  |                                  |                                  | 5                                | 10                               | 21                               | 13                               | 16                               | 4                                |                            | 2           |
|                                               |                                  |                                  |                                  |                                  | 6                                | 13                               | 13                               | 12                               | 28                               | 2                                |                            | 3           |
|                                               |                                  |                                  |                                  |                                  | 11                               | 20                               | 13                               | 12                               | 22                               |                                  |                            | 4           |
|                                               |                                  |                                  |                                  |                                  | 12                               | 11                               | 21                               | 10                               | 14                               | 12                               |                            | 5           |
|                                               |                                  |                                  |                                  |                                  | 6                                | 5                                | 25                               | 6                                | 10                               |                                  |                            | 6           |
|                                               |                                  |                                  |                                  |                                  | 5                                | 12                               | 30                               | 5                                |                                  |                                  |                            | 7           |
|                                               |                                  |                                  |                                  |                                  | 5                                | 12                               | 40                               | 5                                |                                  |                                  |                            | 8           |
|                                               |                                  |                                  |                                  |                                  | 4                                | 18                               | 13                               | 7                                | 11                               |                                  |                            | 9           |
|                                               |                                  |                                  |                                  | 6                                |                                  | 10                               | 10                               |                                  |                                  |                                  |                            | 10          |
|                                               |                                  |                                  |                                  | 6                                | 2                                | 12                               | 6                                |                                  |                                  |                                  |                            | 11          |
|                                               |                                  |                                  |                                  | 6                                | 3                                | 12                               | 6                                |                                  |                                  |                                  |                            | 12          |
|                                               |                                  |                                  |                                  | 4                                | 3                                | 5                                | 13                               |                                  |                                  |                                  |                            | 13          |
|                                               |                                  |                                  |                                  | 4                                | 2                                | 5                                | 13                               | 6                                |                                  |                                  |                            | 14          |
|                                               |                                  |                                  |                                  |                                  | 5                                |                                  | 21                               | 4                                |                                  |                                  |                            | 15          |
|                                               |                                  |                                  |                                  |                                  | 5                                | 1                                | 1                                | 8                                | 14                               |                                  |                            | 16          |
|                                               |                                  |                                  |                                  |                                  | 5                                | 1                                | 14                               | 4                                |                                  |                                  |                            | 17          |
|                                               |                                  |                                  |                                  |                                  | 5                                | 1                                | 18                               | 6                                | 2                                |                                  |                            | 18          |
|                                               |                                  |                                  |                                  |                                  | 4                                | 8                                | 12                               | 3                                | 1                                |                                  |                            | 19          |
|                                               |                                  |                                  |                                  | 1                                | 1                                |                                  | 5                                | 4                                | 9                                |                                  |                            | 20          |
|                                               |                                  |                                  |                                  | 1                                | 1                                | 1                                | 7                                | 6                                | 1                                |                                  |                            | 21          |
|                                               |                                  |                                  |                                  | 1                                | 5                                | 4                                | 10                               | 6                                | 1                                |                                  |                            | 22          |
|                                               |                                  |                                  |                                  | 1                                | 5                                | 6                                | 9                                | 8                                | 1                                |                                  |                            | 23          |
|                                               |                                  |                                  |                                  |                                  | 2                                | 5                                | 7                                | 2                                | 1                                |                                  |                            | 24          |
|                                               |                                  |                                  |                                  |                                  |                                  | 2                                | 8                                | 7                                |                                  |                                  |                            | 25          |
|                                               |                                  |                                  |                                  |                                  |                                  | 1                                | 11                               | 5                                |                                  |                                  |                            | 26          |
|                                               |                                  |                                  |                                  |                                  |                                  | 2                                | 8                                | 5                                | 2                                |                                  |                            | 27          |
|                                               |                                  |                                  |                                  |                                  |                                  | 2                                | 8                                | 9                                | 2                                |                                  |                            | 28          |
|                                               |                                  |                                  |                                  |                                  |                                  | 4                                | 4                                | 10                               | 3                                |                                  |                            | 29          |
|                                               |                                  |                                  |                                  |                                  | 7                                | 2                                | 10                               |                                  |                                  |                                  |                            | 30          |
|                                               |                                  |                                  |                                  |                                  | 7                                | 5                                | 2                                |                                  |                                  |                                  |                            | 31          |
|                                               |                                  |                                  |                                  |                                  | 9                                | 5                                | 2                                |                                  |                                  |                                  |                            | 32          |
|                                               |                                  |                                  | 2                                | 1                                | 5                                | 8                                | 2                                |                                  |                                  |                                  |                            | 33          |
|                                               |                                  |                                  | 2                                | 1                                | 5                                | 8                                | 4                                |                                  |                                  |                                  |                            | 34          |
|                                               |                                  |                                  |                                  |                                  | 6                                | 5                                | 9                                |                                  |                                  |                                  |                            | 35          |
|                                               |                                  |                                  |                                  |                                  | 8                                | 4                                | 4                                |                                  |                                  |                                  |                            | 36          |
|                                               |                                  |                                  |                                  |                                  | 7                                | 6                                | 3                                |                                  |                                  |                                  |                            | 37          |
|                                               |                                  |                                  |                                  |                                  | 8                                | 6                                | 3                                |                                  |                                  |                                  |                            | 38          |
|                                               |                                  |                                  |                                  | 2                                | 5                                | 6                                | 4                                |                                  |                                  |                                  |                            | 39          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 40          |
|                                               |                                  | 18                               | 40                               | 6                                |                                  |                                  |                                  |                                  |                                  |                                  |                            | 41          |
|                                               |                                  | 9                                | 44                               | 6                                |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                  | 13                               | 47                               | 6                                |                                  |                                  |                                  |                                  |                                  |                                  |                            | 42          |
|                                               | 3                                |                                  | 60                               | 10                               |                                  |                                  |                                  |                                  |                                  |                                  |                            | 43          |
|                                               | 3                                |                                  | 42                               | 10                               |                                  |                                  |                                  |                                  |                                  |                                  |                            | 44          |
|                                               |                                  |                                  |                                  | 32                               | 27                               |                                  |                                  |                                  |                                  |                                  |                            | 45          |
|                                               |                                  |                                  |                                  | 38                               | 16                               |                                  |                                  |                                  |                                  |                                  |                            | 46          |
|                                               |                                  |                                  | 6                                | 24                               | 23                               | 3                                |                                  |                                  |                                  |                                  |                            | 47          |
|                                               |                                  |                                  |                                  | 30                               | 23                               | 3                                |                                  |                                  |                                  |                                  |                            | 48          |
|                                               |                                  |                                  |                                  | 10                               | 41                               | 10                               |                                  |                                  |                                  |                                  |                            | 49          |

TABLE M.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER BY YEARS, 1910 TO 1915—

| Line No. | Occupation, and number of plants. | Year. | Number of employ-ees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |     |                      |    |
|----------|-----------------------------------|-------|-----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|-----|----------------------|----|
|          |                                   |       |                       |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72  | Over 72 and under 84 | 84 |
| 1        | Hotbed lever men:                 | 1910  | 34                    | 74.1                              | \$0.209                         | \$15.64                            |                                                |                      |                 |    |                      | 28  |                      | 6  |
| 2        | 6 plants.....                     | 1911  | 27                    | 72.1                              | .197                            | 14.21                              |                                                |                      |                 |    |                      | 19  | 8                    |    |
| 3        | 7 plants.....                     | 1911  | 31                    | 72.1                              | .195                            | 14.06                              |                                                |                      |                 |    |                      | 23  | 8                    |    |
| 4        |                                   | 1912  | 35                    | 72.1                              | .201                            | 14.51                              |                                                |                      |                 |    |                      | 27  | 8                    |    |
| 5        | 7 plants.....                     | 1912  | 35                    | 72.1                              | .195                            | 14.07                              |                                                |                      |                 |    |                      | 27  | 8                    |    |
| 6        |                                   | 1913  | 36                    | 72.1                              | .213                            | 15.36                              |                                                |                      |                 |    |                      | 28  | 8                    |    |
| 7        | 6 plants.....                     | 1913  | 34                    | 72.1                              | .202                            | 14.57                              |                                                |                      |                 |    |                      | 26  | 8                    |    |
| 8        |                                   | 1914  | 30                    | 72.0                              | .207                            | 14.93                              |                                                |                      |                 |    |                      | 30  |                      |    |
| 9        | 7 plants.....                     | 1914  | 32                    | 71.6                              | .213                            | 15.21                              |                                                |                      |                 |    | 2                    | 30  |                      |    |
| 10       |                                   | 1915  | 29                    | 71.8                              | .209                            | 14.94                              |                                                |                      |                 |    | 1                    | 28  |                      |    |
| 11       | Hotbed men:                       | 1910  | 44                    | 73.6                              | .176                            | 12.95                              |                                                |                      |                 |    |                      | 38  |                      | 6  |
| 12       | 6 plants.....                     | 1911  | 43                    | 72.0                              | .175                            | 12.60                              |                                                |                      |                 |    |                      | 43  |                      |    |
| 13       | 7 plants.....                     | 1911  | 47                    | 72.0                              | .176                            | 12.65                              |                                                |                      |                 |    |                      | 47  |                      |    |
| 14       |                                   | 1912  | 48                    | 72.2                              | .180                            | 12.98                              |                                                |                      |                 |    |                      | 46  | 2                    |    |
| 15       | 7 plants.....                     | 1912  | 46                    | 72.0                              | .181                            | 13.01                              |                                                |                      |                 |    |                      | 46  |                      |    |
| 16       |                                   | 1913  | 48                    | 72.0                              | .209                            | 15.01                              |                                                |                      |                 |    |                      | 48  |                      |    |
| 17       | 6 plants.....                     | 1913  | 56                    | 72.0                              | .188                            | 13.54                              |                                                |                      |                 |    |                      | 56  |                      |    |
| 18       |                                   | 1914  | 41                    | 72.0                              | .187                            | 13.47                              |                                                |                      |                 |    |                      | 41  |                      |    |
| 19       | 7 plants.....                     | 1914  | 43                    | 71.7                              | .185                            | 13.30                              |                                                |                      |                 |    | 2                    | 41  |                      |    |
| 20       |                                   | 1915  | 49                    | 71.9                              | .174                            | 12.54                              |                                                |                      |                 |    | 1                    | 48  |                      |    |
| 21       | Straighteners, gag press:         | 1910  | 106                   | 59.0                              | .564                            | 32.41                              | 66                                             |                      |                 |    | 6                    | 12  |                      | 22 |
| 22       | 5 plants.....                     | 1911  | 90                    | 56.3                              | .534                            | 30.12                              | 56                                             |                      |                 |    | 6                    | 28  |                      |    |
| 23       | 6 plants.....                     | 1911  | 94                    | 56.9                              | .526                            | 29.91                              | 56                                             |                      |                 |    | 6                    | 32  |                      |    |
| 24       |                                   | 1912  | 98                    | 57.6                              | .530                            | 30.79                              | 56                                             |                      |                 |    | 6                    | 36  |                      |    |
| 25       | 7 plants.....                     | 1912  | 110                   | 59.1                              | .514                            | 30.45                              | 56                                             |                      |                 |    | 6                    | 48  |                      |    |
| 26       |                                   | 1913  | 101                   | 59.2                              | .576                            | 34.06                              | 51                                             |                      |                 |    | 6                    | 44  |                      |    |
| 27       | 5 plants.....                     | 1913  | 89                    | 55.0                              | .552                            | 30.41                              | 63                                             |                      |                 |    |                      | 26  |                      |    |
| 28       |                                   | 1914  | 75                    | 54.7                              | .533                            | 29.44                              | 54                                             |                      |                 |    |                      | 21  |                      |    |
| 29       | 6 plants.....                     | 1914  | 84                    | 53.7                              | .571                            | 30.59                              | 63                                             |                      |                 |    |                      | 21  |                      |    |
| 30       |                                   | 1915  | 85                    | 56.2                              | .612                            | 34.22                              | 54                                             |                      |                 |    |                      | 31  |                      |    |
| 31       | Straighteners' helpers:           | 1910  | 139                   | 72.1                              | .205                            | 14.55                              |                                                |                      |                 |    | 23                   | 92  |                      | 24 |
| 32       | 5 plants.....                     | 1911  | 116                   | 69.8                              | .205                            | 14.04                              |                                                |                      |                 |    | 21                   | 95  |                      |    |
| 33       | 6 plants.....                     | 1911  | 120                   | 69.9                              | .205                            | 14.05                              |                                                |                      |                 |    | 21                   | 99  |                      |    |
| 34       |                                   | 1912  | 134                   | 70.0                              | .212                            | 14.51                              |                                                |                      |                 |    | 22                   | 112 |                      |    |
| 35       | 7 plants.....                     | 1912  | 146                   | 70.2                              | .211                            | 14.54                              |                                                |                      |                 |    | 22                   | 124 |                      |    |
| 36       |                                   | 1913  | 131                   | 70.0                              | .253                            | 17.28                              |                                                |                      |                 |    | 22                   | 109 |                      |    |
| 37       | 5 plants.....                     | 1913  | 125                   | 72.0                              | .205                            | 14.73                              |                                                |                      |                 |    |                      | 125 |                      |    |
| 38       |                                   | 1914  | 97                    | 72.0                              | .215                            | 15.50                              |                                                |                      |                 |    |                      | 97  |                      |    |
| 39       | 6 plants.....                     | 1914  | 102                   | 71.7                              | .226                            | 16.12                              |                                                |                      |                 |    | 5                    | 97  |                      |    |
| 40       |                                   | 1915  | 118                   | 71.4                              | .219                            | 15.47                              |                                                |                      |                 |    | 10                   | 108 |                      |    |
| 41       | Chippers:                         | 1910  | 114                   | 72.1                              | .231                            | 16.78                              |                                                |                      |                 |    | 12                   | 16  |                      | 25 |
| 42       | 5 plants.....                     | 1911  | 82                    | 70.0                              | .240                            | 16.88                              |                                                |                      |                 |    | 2                    | 16  | 64                   |    |
| 43       | 6 plants.....                     | 1911  | 91                    | 70.2                              | .233                            | 16.44                              |                                                |                      |                 |    | 2                    | 16  | 73                   |    |
| 44       |                                   | 1912  | 99                    | 70.3                              | .221                            | 15.60                              |                                                |                      |                 |    | 2                    | 16  | 81                   |    |
| 45       | 7 plants.....                     | 1912  | 113                   | 70.2                              | .224                            | 15.79                              |                                                |                      |                 |    | 2                    | 20  | 91                   |    |
| 46       |                                   | 1913  | 103                   | 70.0                              | .267                            | 18.76                              |                                                |                      |                 |    | 14                   | 4   | 85                   |    |

HOURLY AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES,  
STANDARD RAIL MILLS—Continued.

| Employees whose rates of wages per hour were— |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 10<br>and<br>under<br>12<br>cts.              | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                  |                                  | 4                                | 14                               | 10                               | 6                                |                                  |                                  |                                  |                                  |                            | 1           |
|                                               |                                  |                                  | 6                                | 9                                | 12                               |                                  |                                  |                                  |                                  |                                  |                            | 2           |
|                                               |                                  |                                  | 8                                | 11                               | 12                               |                                  |                                  |                                  |                                  |                                  |                            | 3           |
|                                               |                                  |                                  | 9                                | 12                               | 12                               | 2                                |                                  |                                  |                                  |                                  |                            | 4           |
|                                               |                                  |                                  | 11                               | 12                               | 12                               |                                  |                                  |                                  |                                  |                                  |                            | 5           |
|                                               |                                  |                                  |                                  | 10                               | 26                               |                                  |                                  |                                  |                                  |                                  |                            | 6           |
|                                               | 4                                |                                  |                                  | 8                                | 22                               |                                  |                                  |                                  |                                  |                                  |                            | 8           |
|                                               | 4                                |                                  |                                  | 5                                | 18                               | 3                                |                                  |                                  |                                  |                                  |                            | 7           |
|                                               | 4                                |                                  |                                  | 5                                | 18                               | 5                                |                                  |                                  |                                  |                                  |                            | 9           |
|                                               | 4                                |                                  |                                  | 6                                | 16                               | 2                                | 1                                |                                  |                                  |                                  |                            | 10          |
| 6                                             |                                  |                                  | 16                               | 8                                | 14                               |                                  |                                  |                                  |                                  |                                  |                            | 11          |
| 6                                             |                                  | 4                                | 18                               | 2                                | 13                               |                                  |                                  |                                  |                                  |                                  |                            | 12          |
| 6                                             |                                  | 4                                | 20                               | 4                                | 13                               |                                  |                                  |                                  |                                  |                                  |                            | 13          |
| 6                                             |                                  | 2                                | 25                               | 3                                | 8                                | 4                                |                                  |                                  |                                  |                                  |                            | 14          |
| 6                                             |                                  | 1                                | 24                               | 3                                | 8                                | 4                                |                                  |                                  |                                  |                                  |                            | 15          |
|                                               | 6                                |                                  |                                  | 18                               | 18                               | 2                                | 4                                |                                  |                                  |                                  |                            | 16          |
|                                               | 6                                |                                  | 16                               | 16                               | 18                               |                                  |                                  |                                  |                                  |                                  |                            | 17          |
|                                               | 6                                |                                  | 16                               | 7                                | 2                                | 10                               |                                  |                                  |                                  |                                  |                            | 18          |
|                                               | 6                                | 2                                | 16                               | 7                                | 2                                | 10                               |                                  |                                  |                                  |                                  |                            | 19          |
|                                               | 6                                | 1                                | 22                               | 14                               | 6                                |                                  |                                  |                                  |                                  |                                  |                            | 20          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 14                               | 52                               | 12                               | 36                               | 6                          | 21          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 27                               |                                  | 49                               |                            | 22          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 18                               | 27                               |                                  | 49                               |                            | 23          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 24                               | 18                               |                                  | 50                               | 6                          | 24          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 36                               | 18                               |                                  | 50                               | 6                          | 25          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 36                               | 18                               | 41                               | 6                          | 26          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 48                               |                                  | 41                               |                            | 27          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 24                               | 8                                | 12                               | 13                               | 18                         | 28          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 24                               | 8                                | 12                               | 13                               | 27                         | 29          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 8                                | 33                               | 7                                | 10                               | 27                         | 30          |
|                                               |                                  | 1                                | 72                               |                                  | 42                               | 1                                | 23                               |                                  |                                  |                                  |                            | 31          |
|                                               |                                  |                                  | 63                               | 18                               | 14                               |                                  | 21                               |                                  |                                  |                                  |                            | 32          |
|                                               |                                  |                                  | 63                               | 18                               | 18                               |                                  | 21                               |                                  |                                  |                                  |                            | 33          |
|                                               |                                  |                                  | 90                               |                                  | 18                               | 4                                | 16                               | 6                                |                                  |                                  |                            | 34          |
|                                               |                                  |                                  | 90                               |                                  | 30                               | 4                                | 16                               | 6                                |                                  |                                  |                            | 35          |
|                                               |                                  |                                  |                                  | 34                               | 71                               | 4                                |                                  | 22                               |                                  |                                  |                            | 36          |
|                                               |                                  |                                  |                                  | 60                               | 65                               |                                  |                                  |                                  |                                  |                                  |                            | 37          |
|                                               |                                  |                                  |                                  | 14                               | 83                               |                                  |                                  | 5                                |                                  |                                  |                            | 38          |
|                                               |                                  |                                  | 44                               | 20                               | 44                               |                                  |                                  | 10                               |                                  |                                  |                            | 39          |
|                                               |                                  |                                  |                                  | 12                               | 24                               | 57                               |                                  |                                  |                                  |                                  |                            | 40          |
|                                               |                                  |                                  | 21                               | 32                               | 10                               | 27                               | 12                               |                                  |                                  |                                  |                            | 41          |
|                                               |                                  |                                  | 1                                |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 42          |
|                                               |                                  |                                  | 10                               | 32                               | 10                               | 27                               | 12                               |                                  |                                  |                                  |                            | 43          |
|                                               |                                  |                                  | 3                                | 36                               | 48                               |                                  | 12                               |                                  |                                  |                                  |                            | 44          |
|                                               |                                  |                                  | 9                                | 36                               | 48                               | 8                                | 12                               |                                  |                                  |                                  |                            | 45          |
|                                               |                                  |                                  |                                  | 3                                | 30                               | 50                               | 20                               |                                  |                                  |                                  |                            | 46          |

TABLE M.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER BY YEARS, 1910 TO 1915—

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |     |                      |    |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|-----|----------------------|----|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72  | Over 72 and under 84 | 84 |
| 1        | Chippers—Concld.                  | 1913  | 60                   | 72.0                              | \$0.293                         | \$21.09                            |                                                |                      |                 |    |                      | 60  |                      |    |
| 2        | 5 plants.....                     | 1914  | 44                   | 72.0                              | .258                            | 18.56                              |                                                |                      |                 |    |                      | 44  |                      |    |
| 3        | 6 plants.....                     | 1914  | 54                   | 70.8                              | .270                            | 19.07                              |                                                |                      |                 |    | 10                   | 44  |                      |    |
| 4        |                                   | 1915  | 58                   | 70.9                              | .301                            | 21.31                              |                                                |                      |                 |    | 10                   | 48  |                      |    |
| 5        | Drillers and punchers:            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |
| 6        | 5 plants.....                     | 1910  | 152                  | 76.7                              | .220                            | 16.78                              |                                                |                      |                 | 20 |                      | 52  |                      | 80 |
|          |                                   | 1911  | 123                  | 70.5                              | .221                            | 15.59                              |                                                |                      |                 |    | 21                   | 102 |                      |    |
| 7        | 6 plants.....                     | 1911  | 133                  | 70.6                              | .218                            | 15.35                              |                                                |                      |                 |    | 21                   | 112 |                      |    |
| 8        |                                   | 1912  | 145                  | 70.5                              | .206                            | 14.51                              |                                                |                      |                 |    | 24                   | 121 |                      |    |
| 9        | 7 plants.....                     | 1912  | 203                  | 70.5                              | .214                            | 15.05                              |                                                |                      |                 |    | 34                   | 169 |                      |    |
| 10       |                                   | 1913  | 179                  | 70.5                              | .249                            | 17.45                              |                                                |                      |                 | 19 | 4                    | 156 |                      |    |
| 11       | 5 plants.....                     | 1913  | 102                  | 72.0                              | .245                            | 17.60                              |                                                |                      |                 |    |                      | 102 |                      |    |
| 12       |                                   | 1914  | 88                   | 72.0                              | .233                            | 16.75                              |                                                |                      |                 |    |                      | 88  |                      |    |
| 13       | 6 plants.....                     | 1914  | 100                  | 71.2                              | .251                            | 17.80                              |                                                |                      |                 |    | 12                   | 88  |                      |    |
| 14       |                                   | 1915  | 90                   | 71.0                              | .280                            | 19.67                              |                                                |                      |                 |    | 14                   | 76  |                      |    |
| 15       | Cold-saw men:                     |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |
| 16       | 5 plants.....                     | 1910  | 18                   | 74.7                              | .191                            | 14.21                              |                                                |                      |                 | 6  |                      | 2   |                      | 10 |
|          |                                   | 1911  | 18                   | 69.1                              | .194                            | 13.43                              |                                                |                      |                 |    | 8                    | 6   | 4                    |    |
| 17       | 6 plants.....                     | 1911  | 19                   | 69.3                              | .194                            | 13.43                              |                                                |                      |                 |    | 8                    | 7   | 4                    |    |
| 18       |                                   | 1912  | 19                   | 69.3                              | .196                            | 13.60                              |                                                |                      |                 |    | 8                    | 7   | 4                    |    |
| 19       | 6 plants.....                     | 1912  | 22                   | 71.8                              | .213                            | 15.50                              |                                                |                      |                 |    | 8                    | 6   | 4                    | 4  |
| 20       |                                   | 1913  | 23                   | 72.3                              | .233                            | 17.04                              |                                                |                      |                 |    | 8                    | 6   | 4                    | 5  |
| 21       | 6 plants.....                     | 1913  | 17                   | 76.7                              | .239                            | 18.47                              |                                                |                      |                 |    |                      | 8   | 4                    | 5  |
| 22       |                                   | 1914  | 14                   | 72.0                              | .219                            | 15.77                              |                                                |                      |                 | 1  |                      | 12  |                      | 1  |
| 23       | 7 plants.....                     | 1914  | 16                   | 71.3                              | .217                            | 15.46                              |                                                |                      |                 | 1  | 2                    | 12  |                      | 1  |
| 24       |                                   | 1915  | 13                   | 73.4                              | .218                            | 15.99                              |                                                |                      |                 | 1  | 1                    | 8   |                      | 3  |
|          | Cold-saw men's help-              |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |
| 25       | ers:                              |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |
| 26       | 3 plants.....                     | 1910  | 30                   | 76.0                              | .171                            | 12.98                              |                                                |                      |                 |    |                      | 20  |                      | 10 |
|          |                                   | 1911  | 31                   | 72.0                              | .172                            | 12.40                              |                                                |                      |                 |    |                      | 31  |                      |    |
| 27       | 4 plants.....                     | 1911  | 36                   | 72.0                              | .172                            | 12.38                              |                                                |                      |                 |    |                      | 36  |                      |    |
| 28       |                                   | 1912  | 29                   | 72.0                              | .173                            | 12.45                              |                                                |                      |                 |    |                      | 29  |                      |    |
| 29       | 7 plants.....                     | 1912  | 54                   | 73.3                              | .183                            | 13.56                              |                                                |                      |                 | 2  |                      | 44  |                      | 8  |
| 30       |                                   | 1913  | 48                   | 73.5                              | .204                            | 15.10                              |                                                |                      |                 | 2  |                      | 38  |                      | 8  |
| 31       | 6 plants.....                     | 1913  | 52                   | 73.8                              | .197                            | 14.70                              |                                                |                      |                 |    |                      | 44  |                      | 8  |
| 32       |                                   | 1914  | 44                   | 70.9                              | .185                            | 13.14                              |                                                |                      |                 | 4  |                      | 40  |                      |    |
| 33       | 7 plants.....                     | 1914  | 48                   | 70.5                              | .186                            | 13.09                              |                                                |                      |                 | 4  | 4                    | 40  |                      |    |
| 34       |                                   | 1915  | 52                   | 74.3                              | .185                            | 13.82                              |                                                |                      |                 |    | 4                    | 28  |                      | 16 |
| 35       | Inspectors:                       |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |
| 36       | 5 plants.....                     | 1910  | 68                   | 75.5                              | .225                            | 16.77                              |                                                |                      |                 | 9  |                      | 30  |                      | 29 |
|          |                                   | 1911  | 48                   | 70.4                              | .233                            | 16.29                              |                                                |                      |                 | 3  | 6                    | 39  |                      |    |
| 37       | 7 plants.....                     | 1911  | 68                   | 70.9                              | .230                            | 16.25                              |                                                |                      |                 | 3  | 6                    | 59  |                      |    |
| 38       |                                   | 1912  | 76                   | 71.0                              | .228                            | 16.12                              |                                                |                      |                 | 3  | 6                    | 67  |                      |    |
| 39       | 7 plants.....                     | 1912  | 74                   | 70.9                              | .229                            | 16.17                              |                                                |                      |                 | 3  | 6                    | 65  |                      |    |
| 40       |                                   | 1913  | 73                   | 70.5                              | .258                            | 18.11                              |                                                |                      |                 | 5  | 7                    | 61  |                      |    |
| 41       | 6 plants.....                     | 1913  | 67                   | 71.6                              | .244                            | 17.46                              |                                                |                      |                 |    | 6                    | 61  |                      |    |
| 42       |                                   | 1914  | 58                   | 70.9                              | .240                            | 16.95                              |                                                |                      |                 | 3  | 11                   | 44  |                      |    |
| 43       | 7 plants.....                     | 1914  | 62                   | 70.5                              | .236                            | 16.65                              |                                                |                      |                 | 3  | 15                   | 44  |                      |    |
| 44       |                                   | 1915  | 80                   | 71.5                              | .239                            | 17.11                              |                                                |                      |                 | 3  | 6                    | 65  | 6                    |    |



HOURLY AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES,  
STANDARD RAIL MILLS—Continued.

| Employees whose rates of wages per hour were— |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 10<br>and<br>under<br>12<br>cts.              | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 1           |
|                                               |                                  |                                  |                                  | 2                                | 18                               | 40                               | 20                               |                                  |                                  |                                  |                            | 2           |
|                                               |                                  |                                  |                                  | 2                                | 18                               | 8                                | 26                               |                                  |                                  |                                  |                            | 3           |
|                                               |                                  |                                  |                                  | 2                                | 2                                | 27                               | 27                               |                                  |                                  |                                  |                            | 4           |
|                                               |                                  |                                  | 28                               |                                  | 72                               | 52                               |                                  |                                  |                                  |                                  |                            | 5           |
|                                               |                                  |                                  | 4                                | 56                               | 33                               | 30                               |                                  |                                  |                                  |                                  |                            | 6           |
|                                               |                                  |                                  | 14                               | 56                               | 33                               | 30                               |                                  |                                  |                                  |                                  |                            | 7           |
|                                               |                                  |                                  | 2                                | 87                               | 54                               |                                  | 2                                |                                  |                                  |                                  |                            | 8           |
|                                               |                                  |                                  | 2                                | 113                              | 70                               | 16                               | 2                                |                                  |                                  |                                  |                            | 9           |
|                                               |                                  |                                  | 2                                |                                  | 100                              | 65                               | 12                               |                                  |                                  |                                  |                            | 10          |
|                                               |                                  |                                  |                                  |                                  | 44                               | 58                               |                                  |                                  |                                  |                                  |                            | 11          |
|                                               |                                  |                                  |                                  |                                  | 48                               | 34                               | 6                                |                                  |                                  |                                  |                            | 12          |
|                                               |                                  |                                  |                                  |                                  | 48                               | 34                               | 18                               |                                  |                                  |                                  |                            | 13          |
|                                               |                                  |                                  |                                  |                                  | 30                               | 46                               |                                  | 14                               |                                  |                                  |                            | 14          |
|                                               |                                  |                                  | 1                                | 15                               | 2                                |                                  |                                  |                                  |                                  |                                  |                            | 15          |
|                                               |                                  |                                  | 1                                | 16                               |                                  | 1                                |                                  |                                  |                                  |                                  |                            | 16          |
|                                               |                                  |                                  |                                  | 17                               |                                  | 1                                |                                  |                                  |                                  |                                  |                            | 17          |
|                                               |                                  |                                  |                                  | 18                               |                                  |                                  | 1                                |                                  |                                  |                                  |                            | 18          |
|                                               |                                  |                                  |                                  |                                  | 17                               | 2                                | 3                                |                                  |                                  |                                  |                            | 19          |
|                                               |                                  |                                  |                                  |                                  | 18                               | 4                                | 1                                |                                  |                                  |                                  |                            | 20          |
|                                               |                                  |                                  |                                  |                                  | 12                               | 4                                | 1                                |                                  |                                  |                                  |                            | 21          |
|                                               |                                  |                                  |                                  |                                  | 13                               |                                  | 1                                |                                  |                                  |                                  |                            | 22          |
|                                               |                                  |                                  |                                  |                                  | 15                               |                                  | 1                                |                                  |                                  |                                  |                            | 23          |
|                                               |                                  |                                  |                                  |                                  | 12                               | 1                                |                                  |                                  |                                  |                                  |                            | 24          |
|                                               |                                  |                                  | 30                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 25          |
|                                               |                                  |                                  | 31                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 26          |
|                                               |                                  |                                  | 36                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 27          |
|                                               |                                  |                                  | 29                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 28          |
|                                               |                                  |                                  | 46                               |                                  | 4                                | 4                                |                                  |                                  |                                  |                                  |                            | 29          |
|                                               |                                  |                                  | 12                               | 10                               | 18                               | 8                                |                                  |                                  |                                  |                                  |                            | 30          |
|                                               |                                  |                                  | 20                               | 8                                | 16                               | 8                                |                                  |                                  |                                  |                                  |                            | 31          |
|                                               |                                  |                                  | 16                               | 12                               | 16                               |                                  |                                  |                                  |                                  |                                  |                            | 32          |
|                                               |                                  |                                  | 16                               | 16                               | 16                               |                                  |                                  |                                  |                                  |                                  |                            | 33          |
|                                               |                                  |                                  | 20                               | 16                               | 16                               |                                  |                                  |                                  |                                  |                                  |                            | 34          |
|                                               |                                  |                                  | 4                                | 26                               | 30                               | 2                                | 5                                | 1                                |                                  |                                  |                            | 35          |
|                                               |                                  |                                  | 4                                | 10                               | 27                               | 2                                | 4                                | 1                                |                                  |                                  |                            | 36          |
|                                               |                                  |                                  |                                  | 4                                | 10                               | 8                                | 4                                | 1                                |                                  |                                  |                            | 37          |
|                                               |                                  |                                  | 2                                | 19                               | 43                               | 7                                | 2                                | 3                                |                                  |                                  |                            | 38          |
|                                               |                                  |                                  |                                  | 19                               | 41                               | 7                                | 2                                | 3                                |                                  |                                  |                            | 39          |
|                                               |                                  |                                  | 2                                |                                  | 35                               | 29                               | 6                                | 2                                | 1                                |                                  |                            | 40          |
|                                               |                                  |                                  |                                  |                                  | 37                               | 24                               | 6                                |                                  |                                  |                                  |                            | 41          |
|                                               |                                  |                                  |                                  |                                  | 38                               | 14                               | 6                                |                                  |                                  |                                  |                            | 42          |
|                                               |                                  |                                  |                                  | 2                                | 40                               | 14                               | 6                                |                                  |                                  |                                  |                            | 43          |
|                                               |                                  |                                  | 1                                | 5                                | 43                               | 22                               | 9                                |                                  |                                  |                                  |                            | 44          |

TABLE M.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER BY YEARS, 1907 TO 1915—

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |     |                      |    |     |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|-----|----------------------|----|-----|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72  | Over 72 and under 84 | 84 |     |
| 1        | Laborers:                         | 1910  | 501                  | 76.0                              | \$0.163                         | \$12.31                            |                                                |                      |                 |    | 45                   | 22  | 209                  |    | 225 |
| 2        | 6 plants.....                     | 1911  | 370                  | 71.9                              | .169                            | 12.12                              |                                                |                      |                 |    | 20                   | 56  | 218                  | 44 | 32  |
| 3        | 7 plants.....                     | 1911  | 382                  | 71.9                              | .169                            | 12.12                              |                                                |                      |                 |    | 20                   | 56  | 230                  | 44 | 32  |
| 4        |                                   | 1912  | 417                  | 71.9                              | .168                            | 12.07                              |                                                |                      |                 |    | 30                   | 54  | 238                  | 68 | 27  |
| 5        | 7 plants.....                     | 1912  | 327                  | 70.2                              | .169                            | 11.88                              |                                                |                      |                 |    | 21                   | 46  | 257                  |    | 3   |
| 6        |                                   | 1913  | 377                  | 70.5                              | .193                            | 13.61                              |                                                |                      |                 |    | 28                   | 37  | 309                  |    | 3   |
| 7        | 6 plants.....                     | 1913  | 262                  | 71.0                              | .187                            | 13.28                              |                                                |                      |                 |    | 25                   |     | 234                  |    | 3   |
| 8        |                                   | 1914  | 195                  | 70.5                              | .190                            | 13.38                              |                                                |                      |                 |    | 24                   | 8   | 163                  |    |     |
| 9        | 7 plants.....                     | 1914  | 222                  | 69.9                              | .185                            | 12.99                              |                                                |                      |                 |    | 24                   | 35  | 163                  |    |     |
| 10       |                                   | 1915  | 339                  | 71.0                              | .182                            | 12.95                              |                                                |                      |                 |    | 16                   | 22  | 301                  |    |     |
|          | Unclassified—productive:          |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |     |
| 11       | 7 plants.....                     | 1914  | 254                  | 71.6                              | .207                            | 14.82                              | 3                                              |                      |                 |    | 4                    | 13  | 226                  |    | 8   |
| 12       |                                   | 1915  | 361                  | 72.4                              | .203                            | 14.65                              | 3                                              |                      |                 |    | 5                    | 7   | 313                  | 12 | 21  |
|          | Unclassified—nonproductive:       |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |    |     |
| 13       | 7 plants.....                     | 1914  | 414                  | 71.7                              | .226                            | 16.17                              |                                                | 1                    | 6               | 16 | 90                   | 235 | 14                   | 52 |     |
| 14       |                                   | 1915  | 390                  | 71.9                              | .228                            | 16.29                              |                                                |                      | 14              | 4  | 90                   | 217 | 8                    | 57 |     |

HOURLY AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES,  
STANDARD RAIL MILLS—Concluded.

| Employees whose rates of wages per hour were— |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 10<br>and<br>under<br>12<br>cts.              | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                  | 117                              | 384                              |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 1           |
|                                               |                                  | 37                               | 333                              |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 2           |
|                                               |                                  | 37                               | 345                              |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 3           |
|                                               |                                  | 21                               | 396                              |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 4           |
|                                               |                                  | 17                               | 310                              |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 5           |
|                                               |                                  |                                  | 52                               | 185                              | 140                              |                                  |                                  |                                  |                                  |                                  |                            | 6           |
|                                               |                                  |                                  | 81                               | 132                              | 49                               |                                  |                                  |                                  |                                  |                                  |                            | 7           |
|                                               |                                  |                                  | 47                               | 89                               | 59                               |                                  |                                  |                                  |                                  |                                  |                            | 8           |
|                                               |                                  | 13                               | 61                               | 89                               | 59                               |                                  |                                  |                                  |                                  |                                  |                            | 9           |
|                                               |                                  |                                  | 172                              | 89                               | 78                               |                                  |                                  |                                  |                                  |                                  |                            | 10          |
|                                               |                                  | 3                                | 36                               | 72                               | 112                              | 22                               | 9                                |                                  |                                  |                                  |                            | 11          |
|                                               |                                  |                                  | 83                               | 113                              | 113                              | 42                               | 8                                | 2                                |                                  |                                  |                            | 12          |
|                                               |                                  | 3                                | 29                               | 126                              | 148                              | 49                               | 58                               | 1                                |                                  |                                  |                            | 13          |
|                                               |                                  | 12                               | 22                               | 126                              | 127                              | 32                               | 60                               | 2                                |                                  |                                  |                            | 14          |

TABLE N.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, 1913 TO 1915—

[The abbreviation "G. L. and M. W." stands for "Great Lakes and

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                       |    |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|-----------------------|----|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84. | 84 |
|          | Charging-machine operators:                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                       |    |
| 1        | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                       |    |
| 2        | 1 plant.....                                | 1913  | 6                    | 72.0                              | \$0.221                         | \$16.63                            |                                                |                      |                 |    |                      | 6  |                       |    |
| 3        |                                             | 1914  | 6                    | 72.0                              | .266                            | 19.08                              |                                                |                      |                 |    |                      | 6  |                       |    |
|          |                                             | 1915  | 6                    | 72.0                              | .227                            | 16.34                              |                                                |                      |                 |    |                      | 6  |                       |    |
| 4        | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                       |    |
| 5        | 2 plants.....                               | 1913  | 16                   | 72.0                              | .265                            | 19.04                              |                                                |                      |                 |    |                      | 16 |                       |    |
| 6        |                                             | 1914  | 16                   | 72.0                              | .286                            | 20.57                              |                                                |                      |                 |    |                      | 16 |                       |    |
|          |                                             | 1915  | 16                   | 72.0                              | .226                            | 16.24                              |                                                |                      |                 |    |                      | 16 |                       |    |
| 7        | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                       |    |
| 8        | 3 plants.....                               | 1913  | 22                   | 72.0                              | .255                            | 18.39                              |                                                |                      |                 |    |                      | 22 |                       |    |
|          |                                             | 1914  | 22                   | 72.0                              | .280                            | 20.17                              |                                                |                      |                 |    |                      | 22 |                       |    |
| 9        |                                             | 1915  | 22                   | 72.0                              | .226                            | 16.27                              |                                                |                      |                 |    |                      | 22 |                       |    |
|          | Reheaters:                                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                       |    |
|          | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                       |    |
| 10       | 1 plant.....                                | 1913  | 2                    | 72.0                              | .470                            | 33.84                              |                                                |                      |                 |    |                      | 2  |                       |    |
| 11       |                                             | 1914  | 2                    | 72.0                              | .379                            | 27.29                              |                                                |                      |                 |    |                      | 2  |                       |    |
| 12       |                                             | 1915  | 2                    | 72.0                              | .327                            | 23.54                              |                                                |                      |                 |    |                      | 2  |                       |    |
| 13       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                       |    |
| 14       | 2 plants.....                               | 1913  | 12                   | 72.0                              | .368                            | 26.48                              |                                                |                      |                 |    |                      | 12 |                       |    |
|          |                                             | 1914  | 12                   | 72.0                              | .329                            | 23.66                              |                                                |                      |                 |    |                      | 12 |                       |    |
| 15       |                                             | 1915  | 10                   | 72.0                              | .396                            | 28.53                              |                                                |                      |                 |    |                      | 10 |                       |    |
|          | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                       |    |
| 16       | 3 plants.....                               | 1913  | 14                   | 72.0                              | .382                            | 27.53                              |                                                |                      |                 |    |                      | 14 |                       |    |
| 17       |                                             | 1914  | 14                   | 72.0                              | .336                            | 24.18                              |                                                |                      |                 |    |                      | 14 |                       |    |
| 18       |                                             | 1915  | 12                   | 72.0                              | .385                            | 27.70                              |                                                |                      |                 |    |                      | 12 |                       |    |
|          | Reheater's helpers:                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                       |    |
|          | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                       |    |
| 19       | 1 plant.....                                | 1913  | 10                   | 72.0                              | .287                            | 20.68                              |                                                |                      |                 |    |                      | 10 |                       |    |
| 20       |                                             | 1914  | 10                   | 72.0                              | .310                            | 22.32                              |                                                |                      |                 |    |                      | 10 |                       |    |
| 21       |                                             | 1915  | 10                   | 72.0                              | .259                            | 18.66                              |                                                |                      |                 |    |                      | 10 |                       |    |
| 22       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                       |    |
| 23       | 1 plant.....                                | 1913  | 12                   | 72.0                              | .354                            | 25.49                              |                                                |                      |                 |    |                      | 12 |                       |    |
|          |                                             | 1914  | 10                   | 72.0                              | .398                            | 28.66                              |                                                |                      |                 |    |                      | 10 |                       |    |
| 24       |                                             | 1915  | 10                   | 72.0                              | .248                            | 17.88                              |                                                |                      |                 |    |                      | 10 |                       |    |
|          | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                       |    |
| 25       | 2 plants.....                               | 1913  | 22                   | 72.0                              | .324                            | 23.30                              |                                                |                      |                 |    |                      | 22 |                       |    |
| 26       |                                             | 1914  | 20                   | 72.0                              | .354                            | 25.49                              |                                                |                      |                 |    |                      | 20 |                       |    |
| 27       |                                             | 1915  | 20                   | 72.0                              | .254                            | 18.27                              |                                                |                      |                 |    |                      | 20 |                       |    |
|          | Roll engineers:                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                       |    |
|          | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                       |    |
| 28       | 1 plant.....                                | 1913  | 4                    | 72.0                              | .233                            | 16.78                              |                                                |                      |                 |    |                      | 4  |                       |    |
| 29       |                                             | 1914  | 4                    | 72.0                              | .240                            | 17.28                              |                                                |                      |                 |    |                      | 4  |                       |    |
| 30       | 2 plants.....                               | 1914  | 8                    | 72.0                              | .336                            | 24.19                              |                                                |                      |                 |    |                      | 8  |                       |    |
| 31       |                                             | 1915  | 6                    | 72.0                              | .319                            | 22.97                              |                                                |                      |                 |    |                      | 6  |                       |    |
| 32       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                       |    |
| 33       | 2 plants.....                               | 1913  | 10                   | 80.1                              | .282                            | 22.64                              |                                                |                      |                 |    |                      | 6  | 6                     | 4  |
|          |                                             | 1914  | 10                   | 76.8                              | .290                            | 22.42                              |                                                |                      |                 |    |                      | 6  |                       | 4  |
| 34       |                                             | 1915  | 10                   | 73.5                              | .290                            | 21.29                              |                                                |                      |                 |    |                      | 4  | 6                     |    |
| 35       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                       |    |
|          | 3 plants.....                               | 1913  | 14                   | 72.0                              | .306                            | 22.00                              |                                                |                      |                 |    |                      | 14 |                       |    |
| 36       |                                             | 1914  | 14                   | 72.0                              | .326                            | 23.50                              |                                                |                      |                 |    |                      | 14 |                       |    |
| 37       |                                             | 1915  | 14                   | 72.0                              | .346                            | 24.88                              |                                                |                      |                 |    |                      | 14 |                       |    |
|          | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                       |    |
| 38       | 6 plants.....                               | 1913  | 28                   | 71.9                              | .287                            | 21.48                              |                                                |                      |                 |    |                      | 18 | 6                     | 4  |
| 39       |                                             | 1914  | 28                   | 73.7                              | .301                            | 22.22                              |                                                |                      |                 |    |                      | 24 |                       |    |
| 40       | 7 plants.....                               | 1914  | 32                   | 73.5                              | .317                            | 23.33                              |                                                |                      |                 |    |                      | 28 |                       | 4  |
| 41       |                                             | 1915  | 30                   | 72.5                              | .322                            | 23.30                              |                                                |                      |                 |    |                      | 24 | 6                     |    |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
STANDARD RAIL MILLS.

Middle West." The figures for each group of years are for identical plants.]

| Employees whose rates of wages per hour were— |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | Line<br>No. |
|-----------------------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|-----------------------------|-------------|
| 10<br>and<br>under<br>12<br>cts.              | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>o. er. |             |
|                                               |                                  |                                  |                                  |                                  | 6                                |                                  |                                  |                                  |                                  |                                  |                             | 1           |
|                                               |                                  |                                  |                                  |                                  |                                  | 6                                |                                  |                                  |                                  |                                  |                             | 2           |
|                                               |                                  |                                  |                                  |                                  | 6                                |                                  |                                  |                                  |                                  |                                  |                             | 3           |
|                                               |                                  |                                  |                                  |                                  | 8                                |                                  | 8                                |                                  |                                  |                                  |                             | 4           |
|                                               |                                  |                                  |                                  |                                  | 8                                |                                  | 8                                |                                  |                                  |                                  |                             | 5           |
|                                               |                                  |                                  |                                  |                                  | 16                               |                                  |                                  |                                  |                                  |                                  |                             | 6           |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             |             |
|                                               |                                  |                                  |                                  |                                  | 14                               |                                  | 8                                |                                  |                                  |                                  |                             | 7           |
|                                               |                                  |                                  |                                  |                                  | 8                                | 6                                | 8                                |                                  |                                  |                                  |                             | 8           |
|                                               |                                  |                                  |                                  |                                  | 22                               |                                  | 8                                |                                  |                                  |                                  |                             | 9           |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             |             |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                |                                  |                             | 10          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                             | 11          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 12          |
|                                               |                                  |                                  |                                  |                                  |                                  | 5                                | 10                               | 2                                |                                  |                                  |                             | 13          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 5                                | 1                                | 1                                |                                  |                             | 14          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 8                                |                                  |                                  |                             | 15          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             |             |
|                                               |                                  |                                  |                                  |                                  |                                  | 5                                | 10                               | 4                                |                                  |                                  |                             | 16          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 7                                | 1                                | 1                                |                                  |                             | 17          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 8                                |                                  |                                  |                             | 18          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             |             |
|                                               |                                  |                                  |                                  |                                  |                                  | 10                               |                                  |                                  |                                  |                                  |                             | 19          |
|                                               |                                  |                                  |                                  |                                  |                                  | 10                               | 10                               |                                  |                                  |                                  |                             | 20          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             | 21          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 12                               |                                  |                                  |                                  |                             | 22          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 5                                | 5                                |                                  |                                  |                             | 23          |
|                                               |                                  |                                  |                                  |                                  | 9                                | 1                                |                                  |                                  |                                  |                                  |                             | 24          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             |             |
|                                               |                                  |                                  |                                  |                                  |                                  | 10                               | 12                               |                                  |                                  |                                  |                             | 25          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 15                               | 5                                |                                  |                                  |                             | 26          |
|                                               |                                  |                                  |                                  |                                  | 9                                | 11                               |                                  |                                  |                                  |                                  |                             | 27          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             |             |
|                                               |                                  |                                  |                                  |                                  | 4                                |                                  |                                  |                                  |                                  |                                  |                             | 28          |
|                                               |                                  |                                  |                                  |                                  | 4                                |                                  |                                  |                                  |                                  |                                  |                             | 29          |
|                                               |                                  |                                  |                                  |                                  | 4                                |                                  |                                  | 4                                |                                  |                                  |                             | 30          |
|                                               |                                  |                                  |                                  |                                  | 4                                |                                  |                                  |                                  | 2                                |                                  |                             | 31          |
|                                               |                                  |                                  |                                  |                                  |                                  | 8                                | 2                                |                                  |                                  |                                  |                             | 32          |
|                                               |                                  |                                  |                                  |                                  |                                  | 6                                | 4                                |                                  |                                  |                                  |                             | 33          |
|                                               |                                  |                                  |                                  |                                  |                                  | 6                                | 4                                |                                  |                                  |                                  |                             | 34          |
|                                               |                                  |                                  |                                  |                                  |                                  | 4                                | 10                               |                                  |                                  |                                  |                             | 35          |
|                                               |                                  |                                  |                                  |                                  |                                  | 4                                | 8                                | 2                                |                                  |                                  |                             | 36          |
|                                               |                                  |                                  |                                  |                                  |                                  | 4                                | 6                                | 4                                |                                  |                                  |                             | 37          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             |             |
|                                               |                                  |                                  |                                  |                                  | 4                                | 12                               | 12                               |                                  |                                  |                                  |                             | 38          |
|                                               |                                  |                                  |                                  |                                  | 4                                | 10                               | 12                               | 2                                |                                  |                                  |                             | 39          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                             |             |
|                                               |                                  |                                  |                                  |                                  | 4                                | 10                               | 12                               | 6                                |                                  |                                  |                             | 40          |
|                                               |                                  |                                  |                                  |                                  | 4                                | 10                               | 10                               | 4                                | 2                                |                                  |                             | 41          |

TABLE N.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER YEARS, 1913 TO 1915—STANDARD

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
|          | <b>Rollers:</b>                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
|          | <b>Eastern—</b>                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 1        | 1 plant.....                                | 1913  | 2                    | 72.0                              | \$0.513                         | \$36.94                            |                                                |                      |                 |    |                      | 2  |                      |    |
| 2        |                                             | 1914  | 2                    | 72.0                              | .513                            | 36.94                              |                                                |                      |                 |    |                      | 2  |                      |    |
| 3        | 2 plants.....                               | 1914  | 4                    | 68.8                              | .562                            | 38.48                              |                                                |                      |                 |    | 2                    | 2  |                      |    |
| 4        |                                             | 1915  | 3                    | 69.8                              | .546                            | 37.96                              |                                                |                      |                 |    | 1                    | 2  |                      |    |
| 5        | <b>Pittsburgh—</b>                          |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 6        | 2 plants.....                               | 1913  | 6                    | 72.0                              | .633                            | 45.55                              |                                                |                      |                 |    |                      | 6  |                      |    |
| 7        |                                             | 1914  | 6                    | 72.0                              | .695                            | 50.00                              |                                                |                      |                 |    |                      | 6  |                      |    |
| 8        |                                             | 1915  | 6                    | 72.0                              | .588                            | 42.34                              |                                                |                      |                 |    |                      | 6  |                      |    |
| 9        | <b>G. L. and M. W.—</b>                     |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 10       | 2 plants.....                               | 1913  | 4                    | 72.8                              | .661                            | 48.05                              |                                                |                      |                 |    |                      | 2  | 2                    |    |
|          |                                             | 1914  | 4                    | 72.0                              | .668                            | 48.06                              |                                                |                      |                 |    |                      | 4  |                      |    |
|          |                                             | 1915  | 4                    | 72.0                              | .668                            | 48.06                              |                                                |                      |                 |    |                      | 4  |                      |    |
| 11       | <b>Total—</b>                               |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 12       | 5 plants.....                               | 1913  | 12                   | 72.3                              | .622                            | 44.95                              |                                                |                      |                 |    |                      | 10 | 2                    |    |
|          |                                             | 1914  | 12                   | 72.0                              | .655                            | 47.18                              |                                                |                      |                 |    |                      | 12 |                      |    |
| 13       | 6 plants.....                               | 1914  | 14                   | 71.1                              | .649                            | 46.16                              |                                                |                      |                 |    | 2                    | 12 |                      |    |
| 14       |                                             | 1915  | 13                   | 71.5                              | .603                            | 43.09                              |                                                |                      |                 |    | 1                    | 12 |                      |    |
|          | <b>Rollers' helpers:</b>                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
|          | <b>Pittsburgh—</b>                          |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 15       | 1 plant.....                                | 1914  | 2                    | 72.0                              | .466                            | 33.52                              |                                                |                      |                 |    |                      | 2  |                      |    |
| 16       |                                             | 1915  | 2                    | 72.0                              | .303                            | 21.78                              |                                                |                      |                 |    |                      | 2  |                      |    |
| 17       | <b>G. L. and M. W.—</b>                     |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 18       | 1 plant.....                                | 1913  | 2                    | 72.0                              | .396                            | 28.51                              |                                                |                      |                 |    |                      | 2  |                      |    |
| 19       |                                             | 1914  | 2                    | 72.0                              | .470                            | 33.80                              |                                                |                      |                 |    |                      | 2  |                      |    |
|          |                                             | 1915  | 2                    | 72.0                              | .512                            | 36.83                              |                                                |                      |                 |    |                      | 2  |                      |    |
| 20       | <b>Total—</b>                               |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 21       | 1 plant.....                                | 1913  | 2                    | 72.0                              | .396                            | 28.51                              |                                                |                      |                 |    |                      | 2  |                      |    |
|          |                                             | 1914  | 2                    | 72.0                              | .470                            | 33.80                              |                                                |                      |                 |    |                      | 2  |                      |    |
| 22       | 2 plants.....                               | 1914  | 4                    | 72.0                              | .468                            | 33.66                              |                                                |                      |                 |    |                      | 4  |                      |    |
| 23       |                                             | 1915  | 1                    | 72.0                              | .407                            | 29.30                              |                                                |                      |                 |    |                      | 4  |                      |    |
|          | <b>Table lever men:</b>                     |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
|          | <b>Eastern—</b>                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 24       | 1 plant.....                                | 1913  | 8                    | 72.0                              | .323                            | 23.24                              |                                                |                      |                 |    |                      | 8  |                      |    |
| 25       |                                             | 1914  | 10                   | 72.0                              | .290                            | 18.75                              |                                                |                      |                 |    |                      | 10 |                      |    |
| 26       | 2 plants.....                               | 1914  | 20                   | 68.8                              | .282                            | 19.30                              |                                                |                      |                 |    | 10                   | 10 |                      |    |
| 27       |                                             | 1915  | 15                   | 69.8                              | .302                            | 20.92                              |                                                |                      |                 |    | 5                    | 10 |                      |    |
| 28       | <b>Pittsburgh—</b>                          |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 29       | 2 plants.....                               | 1913  | 14                   | 72.0                              | .358                            | 25.77                              |                                                |                      |                 |    |                      | 14 |                      |    |
| 30       |                                             | 1914  | 12                   | 72.0                              | .368                            | 26.50                              |                                                |                      |                 |    |                      | 14 |                      |    |
|          |                                             | 1915  | 12                   | 72.0                              | .314                            | 21.76                              |                                                |                      |                 |    |                      | 12 |                      |    |
| 31       | <b>G. L. and M. W.—</b>                     |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 32       | 3 plants.....                               | 1913  | 30                   | 58.2                              | .400                            | 22.13                              |                                                | 18                   |                 |    |                      | 12 |                      |    |
| 33       |                                             | 1914  | 30                   | 57.6                              | .335                            | 18.87                              | 18                                             |                      |                 |    |                      | 12 |                      |    |
|          |                                             | 1915  | 26                   | 59.1                              | .413                            | 23.22                              | 14                                             |                      |                 |    |                      | 12 |                      |    |
| 34       | <b>Total—</b>                               |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 35       | 6 plants.....                               | 1913  | 52                   | 64.0                              | .377                            | 23.28                              |                                                | 18                   |                 |    |                      | 34 |                      |    |
|          |                                             | 1914  | 52                   | 63.7                              | .328                            | 20.61                              | 18                                             |                      |                 |    |                      | 34 |                      |    |
| 36       | 7 plants.....                               | 1914  | 62                   | 64.0                              | .324                            | 20.49                              | 18                                             |                      |                 |    | 10                   | 34 |                      |    |
| 37       |                                             | 1915  | 53                   | 65.0                              | .366                            | 22.92                              | 14                                             |                      |                 |    | 5                    | 34 |                      |    |
|          | <b>Table men:</b>                           |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
|          | <b>Eastern—</b>                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 38       | 1 plant.....                                | 1913  | 22                   | 72.0                              | .497                            | 35.77                              |                                                |                      |                 |    |                      | 22 |                      |    |
| 39       |                                             | 1914  | 18                   | 72.0                              | .364                            | 26.18                              |                                                |                      |                 |    |                      | 18 |                      |    |
| 40       | 2 plants.....                               | 1914  | 26                   | 70.0                              | .388                            | 27.04                              |                                                |                      |                 |    | 8                    | 18 |                      |    |
| 41       |                                             | 1915  | 22                   | 70.8                              | .364                            | 25.58                              |                                                |                      |                 |    | 4                    | 18 |                      |    |
| 42       | <b>Pittsburgh—</b>                          |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 43       | 1 plant.....                                | 1913  | 2                    | 72.0                              | .259                            | 18.61                              |                                                |                      |                 |    |                      | 2  |                      |    |
| 44       |                                             | 1914  | 2                    | 72.0                              | .256                            | 18.40                              |                                                |                      |                 |    |                      | 2  |                      |    |
|          |                                             | 1915  | 2                    | 72.0                              | .297                            | 21.35                              |                                                |                      |                 |    |                      | 2  |                      |    |

HOURLY AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY  
RAIL MILLS—Continued.

| Employees whose rates of wages per hour were— |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 10<br>and<br>under<br>12<br>cts.              | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 1           |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                            | 2           |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                            | 3           |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                |                            | 4           |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 1                                |                            | 5           |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 6                                |                            | 6           |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 2                          | 7           |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 4                                |                            | 8           |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                |                            | 9           |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                |                            | 10          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 10                               |                            | 11          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 8                                | 2                          | 12          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 13          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 10                               | 2                          | 14          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 9                                |                            | 15          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 16          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                |                                  |                                  |                            | 17          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                                  |                            | 18          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                |                                  |                            | 19          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  |                                  |                            | 20          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                                  |                            | 21          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                |                                  |                            | 22          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 1                                |                                  |                            | 23          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 1                                | 1                                |                                  |                            | 24          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 25          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 8                                |                                  |                                  |                            | 26          |
|                                               |                                  |                                  |                                  |                                  |                                  | 10                               |                                  |                                  |                                  |                                  |                            | 27          |
|                                               |                                  |                                  |                                  |                                  |                                  | 10                               | 10                               |                                  |                                  |                                  |                            | 28          |
|                                               |                                  |                                  |                                  |                                  |                                  | 10                               | 5                                |                                  |                                  |                                  |                            | 29          |
|                                               |                                  |                                  |                                  |                                  |                                  | 3                                | 9                                | 2                                |                                  |                                  |                            | 30          |
|                                               |                                  |                                  |                                  |                                  |                                  | 1                                | 6                                | 5                                |                                  |                                  |                            | 31          |
|                                               |                                  |                                  |                                  |                                  | 2                                | 4                                | 2                                | 4                                |                                  |                                  |                            | 32          |
|                                               |                                  |                                  |                                  |                                  |                                  | 6                                | 2                                | 8                                | 4                                | 10                               |                            | 33          |
|                                               |                                  |                                  |                                  |                                  | 5                                | 1                                | 24                               |                                  |                                  |                                  |                            | 34          |
|                                               |                                  |                                  |                                  |                                  | 2                                | 4                                | 6                                | 3                                | 11                               |                                  |                            | 35          |
|                                               |                                  |                                  |                                  |                                  |                                  | 6                                | 5                                | 25                               | 6                                | 10                               |                            | 36          |
|                                               |                                  |                                  |                                  |                                  |                                  | 5                                | 12                               | 30                               | 5                                |                                  |                            | 37          |
|                                               |                                  |                                  |                                  |                                  |                                  | 5                                | 12                               | 40                               | 5                                |                                  |                            | 38          |
|                                               |                                  |                                  |                                  |                                  |                                  | 4                                | 18                               | 13                               | 7                                | 11                               |                            | 39          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 40          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 8                                | 14                               |                            | 41          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                |                                  |                            | 42          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 43          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 18                               | 6                                | 2                          | 44          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 12                               | 3                                | 1                                |                            | 45          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  |                                  |                            | 46          |
|                                               |                                  |                                  |                                  |                                  | 1                                |                                  |                                  |                                  |                                  |                                  |                            | 47          |
|                                               |                                  |                                  |                                  |                                  | 1                                |                                  |                                  |                                  |                                  |                                  |                            | 48          |
|                                               |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                                  |                                  |                            | 49          |

TABLE N.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, 1913 TO 1915—STANDARD

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Table men—Concld.                           |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 2        | G. L. & M. W.—                              |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 3        | 1 plant.....                                | 1913  | 4                    | 72.0                              | \$0.200                         | \$14.40                            |                                                |                      |                 |    |                      | 4  |                      |    |
|          |                                             | 1914  | 4                    | 72.0                              | .200                            | 14.40                              |                                                |                      |                 |    |                      | 4  |                      |    |
|          |                                             | 1915  | 4                    | 72.0                              | .200                            | 14.40                              |                                                |                      |                 |    |                      | 4  |                      |    |
| 4        | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 5        | 3 plants.....                               | 1913  | 28                   | 72.0                              | .437                            | 31.49                              |                                                |                      |                 |    |                      | 28 |                      |    |
|          |                                             | 1914  | 24                   | 72.0                              | .327                            | 23.57                              |                                                |                      |                 |    |                      | 24 |                      |    |
| 6        | 4 plants.....                               | 1914  | 32                   | 70.4                              | .356                            | 24.92                              |                                                |                      |                 |    | 8                    | 24 |                      |    |
| 7        |                                             | 1915  | 28                   | 71.1                              | .336                            | 23.68                              |                                                |                      |                 |    | 4                    | 24 |                      |    |
| 8        | Guide setters:                              |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 9        | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
|          | 1 plant.....                                | 1913  | 6                    | 72.0                              | .374                            | 26.93                              |                                                |                      |                 |    |                      | 6  |                      |    |
|          |                                             | 1914  | 6                    | 72.0                              | .332                            | 23.90                              |                                                |                      |                 |    |                      | 6  |                      |    |
| 10       | 2 plants.....                               | 1914  | 10                   | 72.0                              | .369                            | 26.54                              |                                                |                      |                 |    |                      | 10 |                      |    |
| 11       |                                             | 1915  | 10                   | 72.0                              | .365                            | 26.26                              |                                                |                      |                 |    |                      | 10 |                      |    |
| 12       | G. L. & M. W.—                              |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 13       | 3 plants.....                               | 1913  | 11                   | 65.7                              | .405                            | 26.26                              |                                                | 3                    |                 |    |                      | 8  |                      |    |
| 14       |                                             | 1914  | 11                   | 65.5                              | .416                            | 27.62                              | 3                                              |                      |                 |    |                      | 8  |                      |    |
|          |                                             | 1915  | 11                   | 65.5                              | .464                            | 30.44                              | 3                                              |                      |                 |    |                      | 8  |                      |    |
| 15       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 16       | 4 plants.....                               | 1913  | 17                   | 67.9                              | .394                            | 26.49                              |                                                | 3                    |                 |    |                      | 14 |                      |    |
|          |                                             | 1914  | 17                   | 67.8                              | .386                            | 26.31                              | 3                                              |                      |                 |    |                      | 14 |                      |    |
| 17       | 5 plants.....                               | 1914  | 21                   | 68.6                              | .394                            | 27.11                              | 3                                              |                      |                 |    |                      | 18 |                      |    |
| 18       |                                             | 1915  | 21                   | 68.6                              | .417                            | 28.45                              | 3                                              |                      |                 |    |                      | 18 |                      |    |
| 19       | Hot-saw men:                                |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 20       | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
|          | 1 plant.....                                | 1913  | 2                    | 72.0                              | .216                            | 15.55                              |                                                |                      |                 |    |                      | 2  |                      |    |
|          |                                             | 1914  | 2                    | 72.0                              | .222                            | 15.98                              |                                                |                      |                 |    |                      | 2  |                      |    |
| 21       | 2 plants.....                               | 1914  | 3                    | 69.8                              | .226                            | 15.74                              |                                                |                      |                 |    | 1                    | 2  |                      |    |
| 22       |                                             | 1915  | 3                    | 69.8                              | .216                            | 15.02                              |                                                |                      |                 |    | 1                    | 2  |                      |    |
| 23       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 24       | 2 plants.....                               | 1913  | 4                    | 72.0                              | .250                            | 17.98                              |                                                |                      |                 |    |                      | 4  |                      |    |
| 25       |                                             | 1914  | 4                    | 72.0                              | .246                            | 17.71                              |                                                |                      |                 |    |                      | 4  |                      |    |
|          |                                             | 1915  | 4                    | 72.0                              | .241                            | 17.33                              |                                                |                      |                 |    |                      | 4  |                      |    |
| 26       | G. L. & M. W.—                              |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 27       | 3 plants.....                               | 1913  | 10                   | 72.0                              | .272                            | 19.57                              |                                                |                      |                 |    |                      | 10 |                      |    |
| 28       |                                             | 1914  | 10                   | 72.0                              | .281                            | 20.25                              |                                                |                      |                 |    |                      | 10 |                      |    |
|          |                                             | 1915  | 10                   | 72.0                              | .302                            | 21.75                              |                                                |                      |                 |    |                      | 10 |                      |    |
| 29       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 30       | 6 plants.....                               | 1913  | 16                   | 72.0                              | .259                            | 18.67                              |                                                |                      |                 |    |                      | 16 |                      |    |
|          |                                             | 1914  | 16                   | 72.0                              | .265                            | 19.08                              |                                                |                      |                 |    |                      | 16 |                      |    |
| 31       | 7 plants.....                               | 1914  | 17                   | 71.6                              | .263                            | 18.86                              |                                                |                      |                 |    | 1                    | 16 |                      |    |
| 32       |                                             | 1915  | 17                   | 71.6                              | .272                            | 19.52                              |                                                |                      |                 |    | 1                    | 16 |                      |    |
| 33       | Hot-saw men's help-                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 34       | ers: Eastern—                               |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
|          | 1 plant.....                                | 1913  | 16                   | 72.0                              | .192                            | 13.79                              |                                                |                      |                 |    |                      | 16 |                      |    |
|          |                                             | 1914  | 16                   | 72.0                              | .195                            | 14.00                              |                                                |                      |                 |    |                      | 16 |                      |    |
| 35       | 2 plants.....                               | 1914  | 22                   | 70.2                              | .185                            | 13.04                              |                                                |                      |                 |    | 6                    | 16 |                      |    |
| 36       |                                             | 1915  | 17                   | 70.9                              | .181                            | 12.88                              |                                                |                      |                 |    | 3                    | 14 |                      |    |
| 37       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 38       | 2 plants.....                               | 1913  | 14                   | 72.3                              | .215                            | 15.53                              |                                                |                      |                 |    |                      | 6  | 8                    |    |
| 39       |                                             | 1914  | 14                   | 72.0                              | .221                            | 15.90                              |                                                |                      |                 |    |                      | 14 |                      |    |
|          |                                             | 1915  | 14                   | 72.4                              | .192                            | 13.89                              |                                                |                      |                 |    |                      | 6  | 8                    |    |
| 40       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 41       | 3 plants.....                               | 1913  | 30                   | 72.0                              | .191                            | 13.72                              |                                                |                      |                 |    |                      | 30 |                      |    |
| 42       |                                             | 1914  | 30                   | 72.0                              | .192                            | 13.85                              |                                                |                      |                 |    |                      | 30 |                      |    |
|          |                                             | 1915  | 30                   | 72.0                              | .191                            | 13.78                              |                                                |                      |                 |    |                      | 30 |                      |    |



AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
RAIL MILLS—Continued.

| Employees whose rates of wages per hour were— |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 10<br>and<br>under<br>12<br>cts.              | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                  |                                  |                                  |                                  | 4                                |                                  |                                  |                                  |                                  |                                  |                            | 1           |
|                                               |                                  |                                  |                                  |                                  | 4                                |                                  |                                  |                                  |                                  |                                  |                            | 2           |
|                                               |                                  |                                  |                                  |                                  | 4                                |                                  |                                  |                                  |                                  |                                  |                            | 3           |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                  |                                  |                                  |                                  | 5                                |                                  | 1                                | 8                                | 14                               |                                  |                            | 4           |
|                                               |                                  |                                  |                                  |                                  | 5                                | 1                                | 14                               | 4                                |                                  |                                  |                            | 5           |
|                                               |                                  |                                  |                                  |                                  | 5                                | 1                                | 18                               | 6                                | 2                                |                                  |                            | 6           |
|                                               |                                  |                                  |                                  |                                  | 4                                | 8                                | 12                               | 3                                | 1                                |                                  |                            | 7           |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                  |                                  |                                  |                                  |                                  | 1                                | 3                                | 2                                |                                  |                                  |                            | 8           |
|                                               |                                  |                                  |                                  |                                  |                                  | 2                                | 3                                | 1                                |                                  |                                  |                            | 9           |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                  |                                  |                                  |                                  |                                  | 2                                | 3                                | 5                                |                                  |                                  |                            | 10          |
|                                               |                                  |                                  |                                  |                                  |                                  | 4                                | 2                                | 4                                |                                  |                                  |                            | 11          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 8                                | 3                                |                                  |                                  |                            | 12          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 5                                | 4                                | 2                                |                                  |                            | 13          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 6                                | 3                                |                                  |                            | 14          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                  |                                  |                                  |                                  |                                  | 1                                | 11                               | 5                                |                                  |                                  |                            | 15          |
|                                               |                                  |                                  |                                  |                                  |                                  | 2                                | 8                                | 5                                | 2                                |                                  |                            | 16          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                  |                                  |                                  |                                  |                                  | 2                                | 8                                | 9                                |                                  |                                  |                            | 17          |
|                                               |                                  |                                  |                                  |                                  |                                  | 4                                | 4                                | 10                               | 3                                |                                  |                            | 18          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                                  |                                  |                                  |                            | 19          |
|                                               |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                                  |                                  |                                  |                            | 20          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                  |                                  |                                  |                                  | 3                                |                                  |                                  |                                  |                                  |                                  |                            | 21          |
|                                               |                                  |                                  |                                  |                                  | 3                                |                                  |                                  |                                  |                                  |                                  |                            | 22          |
|                                               |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                                  |                                  |                            | 23          |
|                                               |                                  |                                  |                                  |                                  | 2                                | 1                                | 1                                |                                  |                                  |                                  |                            | 24          |
|                                               |                                  |                                  |                                  | 2                                | 2                                | 2                                |                                  |                                  |                                  |                                  |                            | 25          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                  |                                  |                                  |                                  | 4                                | 2                                | 4                                |                                  |                                  |                                  |                            | 26          |
|                                               |                                  |                                  |                                  |                                  | 3                                | 5                                | 2                                |                                  |                                  |                                  |                            | 27          |
|                                               |                                  |                                  |                                  |                                  | 2                                | 4                                | 4                                |                                  |                                  |                                  |                            | 28          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                  |                                  |                                  |                                  | 8                                | 4                                | 4                                |                                  |                                  |                                  |                            | 29          |
|                                               |                                  |                                  |                                  |                                  | 7                                | 6                                | 3                                |                                  |                                  |                                  |                            | 30          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                  |                                  |                                  |                                  | 8                                | 6                                | 3                                |                                  |                                  |                                  |                            | 31          |
|                                               |                                  |                                  |                                  | 2                                | 5                                | 6                                | 4                                |                                  |                                  |                                  |                            | 32          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                  |                                  | 6                                | 10                               |                                  |                                  |                                  |                                  |                                  |                                  |                            | 33          |
|                                               |                                  |                                  |                                  | 6                                | 10                               |                                  |                                  |                                  |                                  |                                  |                            | 34          |
|                                               |                                  |                                  |                                  | 12                               | 10                               |                                  |                                  |                                  |                                  |                                  |                            | 35          |
|                                               |                                  |                                  | 7                                | 10                               |                                  |                                  |                                  |                                  |                                  |                                  |                            | 36          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                  |                                  |                                  |                                  | 14                               |                                  |                                  |                                  |                                  |                                  |                            | 37          |
|                                               |                                  |                                  |                                  |                                  | 11                               | 3                                |                                  |                                  |                                  |                                  |                            | 38          |
|                                               |                                  |                                  |                                  |                                  | 8                                |                                  |                                  |                                  |                                  |                                  |                            | 39          |
|                                               |                                  |                                  | 3                                | 3                                |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                  |                                  |                                  |                                  | 28                               | 2                                |                                  |                                  |                                  |                                  |                            | 40          |
|                                               |                                  |                                  |                                  |                                  | 18                               | 2                                |                                  |                                  |                                  |                                  |                            | 41          |
|                                               |                                  |                                  |                                  |                                  | 28                               | 2                                |                                  |                                  |                                  |                                  |                            | 42          |

TABLE N.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, 1913 TO 1915—STANDARD

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 |
| 1        | Hot-saw men's helpers—Concluded.            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 2        | Total—6 plants.....                         | 1913  | 60                   | 72.1                              | \$0.197                         | \$14.16                            |                                                |                      |                 |    |                      | 52 | 8                    |
|          |                                             | 1914  | 50                   | 72.0                              | .201                            | 14.47                              |                                                |                      |                 |    |                      | 50 |                      |
| 3        | 7 plants.....                               | 1914  | 56                   | 71.3                              | .197                            | 14.08                              |                                                |                      |                 |    | 6                    | 50 |                      |
| 4        |                                             | 1915  | 61                   | 71.8                              | .189                            | 13.56                              |                                                |                      |                 |    | 3                    | 50 | 8                    |
| 5        | Hot-bed lever men: Eastern—                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 6        | 1 plant.....                                | 1913  | 4                    | 72.0                              | .120                            | 8.64                               |                                                |                      |                 |    |                      | 4  |                      |
|          |                                             | 1914  | 4                    | 72.0                              | .120                            | 8.64                               |                                                |                      |                 |    |                      | 4  |                      |
| 7        | 2 plants.....                               | 1914  | 6                    | 69.8                              | .179                            | 12.22                              |                                                |                      |                 |    | 2                    | 4  |                      |
| 8        |                                             | 1915  | 5                    | 70.7                              | .163                            | 11.31                              |                                                |                      |                 |    | 1                    | 4  |                      |
| 9        | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 10       | 2 plants.....                               | 1913  | 12                   | 72.3                              | .221                            | 15.96                              |                                                |                      |                 |    |                      | 4  | 8                    |
|          |                                             | 1914  | 10                   | 72.0                              | .225                            | 16.23                              |                                                |                      |                 |    |                      | 10 |                      |
| 11       |                                             | 1915  | 10                   | 72.0                              | .208                            | 14.94                              |                                                |                      |                 |    |                      | 10 |                      |
| 12       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 13       | 3 plants.....                               | 1913  | 18                   | 72.0                              | .208                            | 14.97                              |                                                |                      |                 |    |                      | 18 |                      |
|          |                                             | 1914  | 16                   | 72.0                              | .218                            | 15.69                              |                                                |                      |                 |    |                      | 16 |                      |
| 14       |                                             | 1915  | 14                   | 72.0                              | .226                            | 16.24                              |                                                |                      |                 |    |                      | 14 |                      |
| 15       | Total—6 plants.....                         | 1913  | 34                   | 72.1                              | .202                            | 14.57                              |                                                |                      |                 |    |                      | 26 | 8                    |
| 16       |                                             | 1914  | 30                   | 72.0                              | .207                            | 14.93                              |                                                |                      |                 |    |                      | 30 |                      |
| 17       | 7 plants.....                               | 1914  | 32                   | 71.6                              | .213                            | 15.21                              |                                                |                      |                 |    | 2                    | 30 |                      |
| 18       |                                             | 1915  | 29                   | 71.8                              | .209                            | 14.94                              |                                                |                      |                 |    | 1                    | 28 |                      |
| 19       | Hot-bed men: Eastern—                       |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 20       | 1 plant.....                                | 1913  | 16                   | 72.0                              | .176                            | 12.67                              |                                                |                      |                 |    |                      | 16 |                      |
|          |                                             | 1914  | 16                   | 72.0                              | .175                            | 12.60                              |                                                |                      |                 |    |                      | 16 |                      |
| 21       | 2 plants.....                               | 1914  | 18                   | 71.3                              | .172                            | 12.28                              |                                                |                      |                 |    | 2                    | 16 |                      |
| 22       |                                             | 1915  | 17                   | 71.6                              | .164                            | 11.75                              |                                                |                      |                 |    | 1                    | 16 |                      |
| 23       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 24       | 2 plants.....                               | 1913  | 14                   | 72.0                              | .212                            | 15.24                              |                                                |                      |                 |    |                      | 14 |                      |
|          |                                             | 1914  | 10                   | 72.0                              | .231                            | 16.63                              |                                                |                      |                 |    |                      | 10 |                      |
| 25       |                                             | 1915  | 10                   | 72.0                              | .193                            | 14.00                              |                                                |                      |                 |    |                      | 10 |                      |
| 26       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 27       | 3 plants.....                               | 1913  | 26                   | 72.0                              | .183                            | 13.15                              |                                                |                      |                 |    |                      | 26 |                      |
|          |                                             | 1914  | 15                   | 72.0                              | .171                            | 12.29                              |                                                |                      |                 |    |                      | 15 |                      |
| 28       |                                             | 1915  | 22                   | 72.0                              | .173                            | 12.49                              |                                                |                      |                 |    |                      | 22 |                      |
| 29       | Total—6 plants.....                         | 1913  | 56                   | 72.0                              | .188                            | 13.54                              |                                                |                      |                 |    |                      | 56 |                      |
| 30       |                                             | 1914  | 41                   | 72.0                              | .187                            | 13.47                              |                                                |                      |                 |    |                      | 41 |                      |
| 31       | 7 plants.....                               | 1914  | 43                   | 71.7                              | .185                            | 13.30                              |                                                |                      |                 |    | 2                    | 41 |                      |
| 32       |                                             | 1915  | 49                   | 71.9                              | .174                            | 12.54                              |                                                |                      |                 |    | 1                    | 48 |                      |
| 33       | Straighteners, gag press: Eastern—          |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 34       | 1 plant.....                                | 1913  | 12                   | 48.0                              | .494                            | 23.71                              | 12                                             |                      |                 |    |                      |    |                      |
|          |                                             | 1914  | 12                   | 48.0                              | .510                            | 24.48                              | 12                                             |                      |                 |    |                      |    |                      |
| 35       | 2 plants.....                               | 1914  | 21                   | 46.9                              | .672                            | 31.22                              | 21                                             |                      |                 |    |                      |    |                      |
| 36       |                                             | 1915  | 30                   | 46.4                              | .765                            | 35.12                              | 30                                             |                      |                 |    |                      |    |                      |
| 37       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 38       | 2 plants.....                               | 1913  | 36                   | 56.0                              | .453                            | 25.20                              | 24                                             |                      |                 |    |                      | 12 |                      |
|          |                                             | 1914  | 32                   | 54.0                              | .373                            | 20.72                              | 24                                             |                      |                 |    |                      | 8  |                      |
| 39       |                                             | 1915  | 35                   | 55.5                              | .441                            | 24.98                              | 24                                             |                      |                 |    |                      | 11 |                      |
| 40       | G. L. & M. W.—                              |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 41       | 2 plants.....                               | 1913  | 41                   | 56.2                              | .655                            | 36.96                              | 27                                             |                      |                 |    |                      | 14 |                      |
|          |                                             | 1914  | 31                   | 58.1                              | .707                            | 40.36                              | 18                                             |                      |                 |    |                      | 13 |                      |
| 42       |                                             | 1915  | 20                   | 72.0                              | .681                            | 49.03                              |                                                |                      |                 |    |                      | 20 |                      |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
RAIL MILLS—Continued.

| Employees whose rates of wages per hour were— |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 10<br>and<br>under<br>12<br>cts.              | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                  |                                  | 6                                | 38                               | 16                               |                                  |                                  |                                  |                                  |                                  |                            | 1           |
|                                               |                                  |                                  |                                  | 24                               | 23                               | 3                                |                                  |                                  |                                  |                                  |                            | 2           |
|                                               |                                  |                                  |                                  | 30                               | 23                               | 3                                |                                  |                                  |                                  |                                  |                            | 3           |
|                                               |                                  |                                  | 10                               | 41                               | 10                               |                                  |                                  |                                  |                                  |                                  |                            | 4           |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               | 4                                |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 5           |
|                                               | 4                                |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 6           |
|                                               | 4                                |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                                  |                                  |                            | 7           |
|                                               | 4                                |                                  |                                  |                                  |                                  |                                  | 1                                |                                  |                                  |                                  |                            | 8           |
|                                               |                                  |                                  |                                  | 4                                | 8                                |                                  |                                  |                                  |                                  |                                  |                            | 9           |
|                                               |                                  |                                  |                                  | 4                                | 4                                | 2                                |                                  |                                  |                                  |                                  |                            | 10          |
|                                               |                                  |                                  |                                  | 6                                | 4                                |                                  |                                  |                                  |                                  |                                  |                            | 11          |
|                                               |                                  |                                  |                                  | 4                                | 14                               |                                  |                                  |                                  |                                  |                                  |                            | 12          |
|                                               |                                  |                                  |                                  | 1                                | 14                               | 1                                |                                  |                                  |                                  |                                  |                            | 13          |
|                                               |                                  |                                  |                                  |                                  | 12                               | 2                                |                                  |                                  |                                  |                                  |                            | 14          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               | 4                                |                                  |                                  | 8                                | 22                               |                                  |                                  |                                  |                                  |                                  |                            | 15          |
|                                               | 4                                |                                  |                                  | 5                                | 18                               | 3                                |                                  |                                  |                                  |                                  |                            | 16          |
|                                               | 4                                |                                  |                                  | 5                                | 18                               | 5                                |                                  |                                  |                                  |                                  |                            | 17          |
|                                               | 4                                |                                  |                                  | 6                                | 16                               | 2                                | 1                                |                                  |                                  |                                  |                            | 18          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                  |                                  | 16                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 19          |
|                                               |                                  |                                  | 16                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 20          |
|                                               |                                  | 2                                | 16                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 21          |
|                                               |                                  | 1                                | 16                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 22          |
|                                               |                                  |                                  |                                  |                                  | 14                               |                                  |                                  |                                  |                                  |                                  |                            | 23          |
|                                               |                                  |                                  |                                  |                                  |                                  | 10                               |                                  |                                  |                                  |                                  |                            | 24          |
|                                               |                                  |                                  | 2                                | 4                                | 4                                |                                  |                                  |                                  |                                  |                                  |                            | 25          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               | 6                                |                                  |                                  | 16                               | 4                                |                                  |                                  |                                  |                                  |                                  |                            | 26          |
|                                               | 6                                |                                  |                                  | 7                                | 2                                |                                  |                                  |                                  |                                  |                                  |                            | 27          |
|                                               | 6                                |                                  | 4                                | 10                               | 2                                |                                  |                                  |                                  |                                  |                                  |                            | 28          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               | 6                                |                                  | 16                               | 16                               | 18                               |                                  |                                  |                                  |                                  |                                  |                            | 29          |
|                                               | 6                                |                                  | 16                               | 7                                | 2                                | 10                               |                                  |                                  |                                  |                                  |                            | 30          |
|                                               | 6                                | 2                                | 16                               | 7                                | 2                                | 10                               |                                  |                                  |                                  |                                  |                            | 31          |
|                                               | 6                                | 1                                | 22                               | 14                               | 6                                |                                  |                                  |                                  |                                  |                                  |                            | 32          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 12                               |                                  |                                  |                            | 33          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 12                               |                                  |                            | 34          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 12                               |                            | 35          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 9                          | 36          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 12                               |                                  |                                  | 18                         |             |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 37          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 36                               |                                  |                                  |                            | 38          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 24                               | 8                                |                                  |                                  |                            | 39          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 8                                | 21                               | 6                                |                                  |                            |             |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 40          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 41                               |                            | 41          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 13                               |                            | 42          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 10                               |                            |             |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                            |             |

TABLE N.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, 1913 TO 1915—STANDARD

| Line No. | Occupation, district, and number of plants.                   | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |     |                      |
|----------|---------------------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|-----|----------------------|
|          |                                                               |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72  | Over 72 and under 84 |
| 1<br>2   | Straighteners gag press—Concluded.<br>Total—<br>5 plants..... | 1913  | 89                   | 55.0                              | \$0.552                         | \$30.41                            |                                                |                      |                 |    |                      | 26  |                      |
|          |                                                               | 1914  | 75                   | 54.7                              | .533                            | 29.44                              | 63                                             |                      |                 |    |                      | 21  |                      |
| 3<br>4   | 6 plants.....                                                 | 1914  | 84                   | 53.7                              | .571                            | 30.59                              | 63                                             |                      |                 |    |                      | 21  |                      |
|          |                                                               | 1915  | 85                   | 56.2                              | .612                            | 34.22                              | 54                                             |                      |                 |    |                      | 31  |                      |
| 5<br>6   | Straighteners' helpers:<br>Eastern—<br>1 plant.....           | 1913  | 34                   | 72.0                              | .202                            | 14.58                              |                                                |                      |                 |    |                      | 34  |                      |
|          |                                                               | 1914  | 40                   | 72.0                              | .224                            | 16.14                              |                                                |                      |                 |    |                      | 40  |                      |
| 7<br>8   | 2 plants.....                                                 | 1914  | 45                   | 71.3                              | .247                            | 17.49                              |                                                |                      |                 |    | 5                    | 40  |                      |
|          |                                                               | 1915  | 62                   | 71.0                              | .224                            | 15.59                              |                                                |                      |                 |    | 10                   | 52  |                      |
| 9<br>10  | Pittsburgh—<br>2 plants.....                                  | 1913  | 32                   | 72.0                              | .214                            | 15.37                              |                                                |                      |                 |    |                      | 32  |                      |
|          |                                                               | 1914  | 28                   | 72.0                              | .203                            | 14.61                              |                                                |                      |                 |    |                      | 28  |                      |
| 11<br>12 | G. L. & M. W.—<br>2 plants.....                               | 1915  | 24                   | 72.0                              | .211                            | 15.17                              |                                                |                      |                 |    |                      | 24  |                      |
|          |                                                               | 1913  | 59                   | 72.0                              | .201                            | 14.46                              |                                                |                      |                 |    |                      | 59  |                      |
| 13<br>14 | 2 plants.....                                                 | 1914  | 29                   | 72.0                              | .215                            | 15.48                              |                                                |                      |                 |    |                      | 29  |                      |
|          |                                                               | 1915  | 32                   | 72.0                              | .215                            | 15.46                              |                                                |                      |                 |    |                      | 32  |                      |
| 15<br>16 | Total—<br>5 plants.....                                       | 1913  | 125                  | 72.0                              | .205                            | 14.73                              |                                                |                      |                 |    |                      | 125 |                      |
|          |                                                               | 1914  | 97                   | 72.0                              | .215                            | 15.50                              |                                                |                      |                 |    |                      | 97  |                      |
| 17<br>18 | 6 plants.....                                                 | 1914  | 102                  | 71.7                              | .226                            | 16.12                              |                                                |                      |                 |    | 5                    | 97  |                      |
|          |                                                               | 1915  | 118                  | 71.4                              | .219                            | 15.47                              |                                                |                      |                 |    | 10                   | 108 |                      |
| 19<br>20 | Chippers:<br>Eastern—<br>1 plant.....                         | 1913  | 2                    | 72.0                              | .251                            | 18.07                              |                                                |                      |                 |    |                      | 2   |                      |
|          |                                                               | 1914  | 2                    | 72.0                              | .195                            | 14.04                              |                                                |                      |                 |    |                      | 2   |                      |
| 21<br>22 | 2 plants.....                                                 | 1914  | 12                   | 66.6                              | .304                            | 20.13                              |                                                |                      |                 |    | 10                   | 2   |                      |
|          |                                                               | 1915  | 12                   | 66.6                              | .314                            | 20.77                              |                                                |                      |                 |    | 10                   | 2   |                      |
| 23<br>24 | Pittsburgh—<br>2 plants.....                                  | 1913  | 26                   | 72.0                              | .286                            | 20.60                              |                                                |                      |                 |    |                      | 26  |                      |
|          |                                                               | 1914  | 24                   | 72.0                              | .231                            | 16.63                              |                                                |                      |                 |    |                      | 24  |                      |
| 25<br>26 | G. L. & M. W.—<br>2 plants.....                               | 1915  | 26                   | 72.0                              | .294                            | 21.14                              |                                                |                      |                 |    |                      | 26  |                      |
|          |                                                               | 1913  | 32                   | 72.0                              | .301                            | 21.68                              |                                                |                      |                 |    |                      | 32  |                      |
| 27<br>28 | 2 plants.....                                                 | 1914  | 15                   | 72.0                              | .300                            | 21.62                              |                                                |                      |                 |    |                      | 18  |                      |
|          |                                                               | 1915  | 20                   | 72.0                              | .302                            | 21.85                              |                                                |                      |                 |    |                      | 20  |                      |
| 29<br>30 | Total—<br>5 plants.....                                       | 1913  | 60                   | 72.0                              | .293                            | 21.09                              |                                                |                      |                 |    |                      | 60  |                      |
|          |                                                               | 1914  | 44                   | 72.0                              | .253                            | 18.56                              |                                                |                      |                 |    |                      | 44  |                      |
| 31<br>32 | 6 plants.....                                                 | 1914  | 54                   | 70.8                              | .270                            | 19.07                              |                                                |                      |                 |    | 10                   | 44  |                      |
|          |                                                               | 1915  | 58                   | 70.9                              | .301                            | 21.31                              |                                                |                      |                 |    | 10                   | 48  |                      |
| 33<br>34 | Drillers and punchers:<br>Eastern—<br>1 plant.....            | 1913  | 16                   | 72.0                              | .222                            | 15.98                              |                                                |                      |                 |    |                      | 16  |                      |
|          |                                                               | 1914  | 16                   | 72.0                              | .262                            | 18.86                              |                                                |                      |                 |    |                      | 16  |                      |
| 35<br>36 | 2 plants.....                                                 | 1914  | 28                   | 69.2                              | .317                            | 21.73                              |                                                |                      |                 |    | 12                   | 16  |                      |
|          |                                                               | 1915  | 30                   | 69.0                              | .334                            | 22.60                              |                                                |                      |                 |    | 14                   | 16  |                      |
| 37<br>38 | Pittsburgh—<br>2 plants.....                                  | 1913  | 36                   | 72.0                              | .269                            | 19.35                              |                                                |                      |                 |    |                      | 36  |                      |
|          |                                                               | 1914  | 36                   | 72.0                              | .224                            | 16.10                              |                                                |                      |                 |    |                      | 36  |                      |
| 39<br>40 | G. L. and M. W.—<br>2 plants.....                             | 1915  | 36                   | 72.0                              | .259                            | 18.62                              |                                                |                      |                 |    |                      | 36  |                      |
|          |                                                               | 1913  | 50                   | 72.0                              | .234                            | 16.87                              |                                                |                      |                 |    |                      | 50  |                      |
| 41<br>42 | 2 plants.....                                                 | 1914  | 36                   | 72.0                              | .229                            | 16.45                              |                                                |                      |                 |    |                      | 36  |                      |
|          |                                                               | 1915  | 24                   | 72.0                              | .214                            | 17.60                              |                                                |                      |                 |    |                      | 24  |                      |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
RAIL MILLS—Continued.

| Employees whose rates of wages per hour were— |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 10<br>and<br>under<br>12<br>cts.              | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 24                               | 48<br>8                          | 12                               | 41<br>13                         | 18                         | 1           |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  | 24<br>8                          | 8<br>33                          | 12<br>7                          | 13<br>10                         | 27<br>27                   | 2           |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                  |                                  |                                  | 26                               | 8<br>40                          |                                  |                                  |                                  |                                  |                                  |                            | 5           |
|                                               |                                  |                                  |                                  |                                  | 40                               |                                  |                                  |                                  |                                  |                                  |                            | 6           |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 5<br>10                          |                                  |                                  |                            | 7           |
|                                               |                                  |                                  | 44                               | 8                                |                                  |                                  |                                  |                                  |                                  |                                  |                            | 8           |
|                                               |                                  |                                  |                                  |                                  | 32                               |                                  |                                  |                                  |                                  |                                  |                            | 9           |
|                                               |                                  |                                  |                                  |                                  | 28                               |                                  |                                  |                                  |                                  |                                  |                            | 10          |
|                                               |                                  |                                  |                                  |                                  | 24                               |                                  |                                  |                                  |                                  |                                  |                            | 11          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                  |                                  |                                  | 34                               | 25                               |                                  |                                  |                                  |                                  |                                  |                            | 12          |
|                                               |                                  |                                  |                                  | 14                               | 15                               |                                  |                                  |                                  |                                  |                                  |                            | 13          |
|                                               |                                  |                                  |                                  | 12                               | 20                               |                                  |                                  |                                  |                                  |                                  |                            | 14          |
|                                               |                                  |                                  |                                  |                                  | 60<br>14                         | 65<br>83                         |                                  |                                  |                                  |                                  |                            | 15          |
|                                               |                                  |                                  |                                  |                                  | 14                               | 83                               |                                  |                                  |                                  |                                  |                            | 16          |
|                                               |                                  |                                  | 44                               | 20                               | 44                               |                                  |                                  | 5<br>10                          |                                  |                                  |                            | 17          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 18          |
|                                               |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                                  |                                  |                            | 19          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 20          |
|                                               |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                                  |                                  |                                  |                            | 21          |
|                                               |                                  |                                  |                                  |                                  | 2                                |                                  |                                  | 10<br>10                         |                                  |                                  |                            | 22          |
|                                               |                                  |                                  |                                  |                                  |                                  | 18<br>8                          | 8                                |                                  |                                  |                                  |                            | 23          |
|                                               |                                  |                                  |                                  |                                  |                                  | 18                               | 8                                |                                  |                                  |                                  |                            | 24          |
|                                               |                                  |                                  |                                  |                                  |                                  | 20                               | 12                               |                                  |                                  |                                  |                            | 25          |
|                                               |                                  |                                  |                                  |                                  | 2                                | 16                               | 16                               |                                  |                                  |                                  |                            | 26          |
|                                               |                                  |                                  |                                  |                                  | 2                                | 9                                | 9                                |                                  |                                  |                                  |                            | 27          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 28          |
|                                               |                                  |                                  |                                  |                                  |                                  | 40<br>8                          | 20<br>16                         |                                  |                                  |                                  |                            | 29          |
|                                               |                                  |                                  |                                  | 2                                | 18                               |                                  |                                  |                                  |                                  |                                  |                            | 30          |
|                                               |                                  |                                  |                                  | 2                                | 18                               | 8                                | 26                               |                                  |                                  |                                  |                            | 31          |
|                                               |                                  |                                  |                                  | 2                                | 27                               | 27                               | 27                               |                                  |                                  |                                  |                            | 32          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                  |                                  |                                  |                                  | 16                               |                                  |                                  |                                  |                                  |                                  |                            | 33          |
|                                               |                                  |                                  |                                  |                                  |                                  | 16                               |                                  |                                  |                                  |                                  |                            | 34          |
|                                               |                                  |                                  |                                  |                                  |                                  | 16                               | 12                               |                                  |                                  |                                  |                            | 35          |
|                                               |                                  |                                  |                                  |                                  | 16                               |                                  |                                  | 14                               |                                  |                                  |                            | 36          |
|                                               |                                  |                                  |                                  |                                  |                                  | 36<br>16<br>36                   |                                  |                                  |                                  |                                  |                            | 37          |
|                                               |                                  |                                  |                                  |                                  | 20                               |                                  |                                  |                                  |                                  |                                  |                            | 38          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 39          |
|                                               |                                  |                                  |                                  |                                  | 28                               | 22                               |                                  |                                  |                                  |                                  |                            | 40          |
|                                               |                                  |                                  |                                  |                                  | 28                               | 2                                | 6                                |                                  |                                  |                                  |                            | 41          |
|                                               |                                  |                                  |                                  |                                  | 14                               | 10                               |                                  |                                  |                                  |                                  |                            | 42          |

TABLE N.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—STANDARD

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |     |                      |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|-----|----------------------|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72  | Over 72 and under 84 |
| 1        | Drillers and punchers—Concluded.            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 2        | Total—5 plants.....                         | 1913  | 102                  | 72.0                              | \$0.245                         | \$17.60                            |                                                |                      |                 |    |                      | 102 |                      |
|          |                                             | 1914  | 88                   | 72.0                              | .233                            | 16.75                              |                                                |                      |                 |    |                      | 88  |                      |
| 3        | 6 plants.....                               | 1914  | 100                  | 71.2                              | .251                            | 17.80                              |                                                |                      |                 |    | 12                   | 88  |                      |
| 4        |                                             | 1915  | 90                   | 71.0                              | .280                            | 19.67                              |                                                |                      |                 |    | 14                   | 76  |                      |
| 5        | Cold-saw men:                               |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 6        | Eastern—1 plant.....                        | 1913  | 2                    | 72.0                              | .200                            | 14.40                              |                                                |                      |                 |    |                      | 2   |                      |
|          |                                             | 1914  | 2                    | 72.0                              | .200                            | 14.40                              |                                                |                      |                 |    |                      | 2   |                      |
| 7        | 2 plants.....                               | 1914  | 4                    | 69.0                              | .201                            | 13.87                              |                                                |                      |                 |    | 2                    | 2   |                      |
| 8        |                                             | 1915  | 3                    | 70.0                              | .213                            | 14.84                              |                                                |                      |                 |    | 1                    | 2   |                      |
| 9        | Pittsburgh—2 plants.....                    | 1913  | 9                    | 80.9                              | .248                            | 20.20                              |                                                |                      |                 |    |                      |     | 5                    |
| 10       |                                             | 1914  | 6                    | 72.0                              | .212                            | 15.30                              |                                                |                      |                 | 1  |                      | 4   | 1                    |
| 11       |                                             | 1915  | 4                    | 78.0                              | .213                            | 16.65                              |                                                |                      |                 | 1  |                      |     | 3                    |
| 12       | G. L. and M. W.—3 plants.....               | 1913  | 6                    | 72.0                              | .240                            | 17.24                              |                                                |                      |                 |    |                      | 6   |                      |
| 13       |                                             | 1914  | 6                    | 72.0                              | .232                            | 16.69                              |                                                |                      |                 |    |                      | 6   |                      |
| 14       |                                             | 1915  | 6                    | 72.0                              | .224                            | 16.13                              |                                                |                      |                 |    |                      | 6   |                      |
| 15       | Total—6 plants.....                         | 1913  | 17                   | 76.7                              | .239                            | 18.47                              |                                                |                      |                 |    |                      | 8   | 4                    |
| 16       |                                             | 1914  | 14                   | 72.0                              | .219                            | 15.77                              |                                                |                      |                 | 1  |                      | 12  | 1                    |
| 17       | 7 plants.....                               | 1914  | 16                   | 71.3                              | .217                            | 15.46                              |                                                |                      |                 | 1  | 2                    | 12  | 1                    |
| 18       |                                             | 1915  | 13                   | 73.4                              | .218                            | 15.99                              |                                                |                      |                 | 1  | 1                    | 8   | 3                    |
| 19       | Cold-saw men's helpers:                     |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 20       | Eastern—1 plant.....                        | 1913  | 8                    | 72.0                              | .160                            | 11.52                              |                                                |                      |                 |    |                      | 8   |                      |
|          |                                             | 1914  | 8                    | 72.0                              | .160                            | 11.52                              |                                                |                      |                 |    |                      | 8   |                      |
| 21       | 2 plants.....                               | 1914  | 12                   | 70.0                              | .170                            | 11.86                              |                                                |                      |                 |    | 4                    | 8   |                      |
| 22       |                                             | 1915  | 12                   | 70.0                              | .166                            | 11.60                              |                                                |                      |                 |    | 4                    | 8   |                      |
| 23       | Pittsburgh—2 plants.....                    | 1913  | 24                   | 76.0                              | .222                            | 17.08                              |                                                |                      |                 |    |                      | 16  | 8                    |
| 24       |                                             | 1914  | 20                   | 69.6                              | .196                            | 13.98                              |                                                |                      |                 | 4  |                      | 16  |                      |
| 25       |                                             | 1915  | 20                   | 79.2                              | .196                            | 15.60                              |                                                |                      |                 | 4  |                      |     | 16                   |
| 26       | G. L. and M. W.—3 plants.....               | 1913  | 20                   | 72.0                              | .182                            | 13.13                              |                                                |                      |                 |    |                      | 20  |                      |
| 27       |                                             | 1914  | 16                   | 72.0                              | .184                            | 13.27                              |                                                |                      |                 |    |                      | 16  |                      |
| 28       |                                             | 1915  | 20                   | 72.0                              | .189                            | 13.38                              |                                                |                      |                 |    |                      | 20  |                      |
| 29       | Total—6 plants.....                         | 1913  | 52                   | 73.8                              | .197                            | 14.70                              |                                                |                      |                 |    |                      | 44  | 8                    |
| 30       |                                             | 1914  | 44                   | 70.9                              | .185                            | 13.14                              |                                                |                      |                 | 4  |                      | 40  |                      |
| 31       | 7 plants.....                               | 1914  | 48                   | 70.5                              | .186                            | 13.09                              |                                                |                      |                 | 4  | 4                    | 40  |                      |
| 32       |                                             | 1915  | 52                   | 74.3                              | .185                            | 13.82                              |                                                |                      |                 | 4  | 4                    | 28  | 16                   |
| 33       | Inspectors:                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |     |                      |
| 34       | Eastern—1 plant.....                        | 1913  | 6                    | 72.0                              | .213                            | 15.31                              |                                                |                      |                 |    |                      | 6   |                      |
|          |                                             | 1914  | 7                    | 72.0                              | .210                            | 15.12                              |                                                |                      |                 |    |                      | 7   |                      |
| 35       | 2 plants.....                               | 1914  | 11                   | 69.6                              | .202                            | 14.09                              |                                                |                      |                 |    | 4                    | 7   |                      |
| 36       |                                             | 1915  | 11                   | 70.2                              | .200                            | 14.03                              |                                                |                      |                 |    | 3                    | 8   |                      |
| 37       | Pittsburgh—2 plants.....                    | 1913  | 18                   | 71.7                              | .261                            | 18.72                              |                                                |                      |                 |    | 3                    | 15  |                      |
| 38       |                                             | 1914  | 18                   | 69.3                              | .261                            | 18.05                              |                                                |                      |                 | 3  | 8                    | 7   |                      |
| 39       |                                             | 1915  | 27                   | 72.0                              | .263                            | 18.97                              |                                                |                      |                 | 3  |                      | 18  | 6                    |
| 40       | G. L. and M. W.—3 plants.....               | 1913  | 43                   | 71.6                              | .241                            | 17.23                              |                                                |                      |                 |    | 3                    | 40  |                      |
| 41       |                                             | 1914  | 33                   | 71.5                              | .234                            | 16.74                              |                                                |                      |                 |    | 3                    | 30  |                      |
| 42       |                                             | 1915  | 42                   | 71.6                              | .234                            | 16.72                              |                                                |                      |                 |    | 3                    | 39  |                      |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
RAIL MILLS—Continued.

| Employees whose rates of wages per hour were— |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 10<br>and<br>under<br>12<br>cts.              | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                  |                                  |                                  |                                  | 44                               | 58                               |                                  |                                  |                                  |                                  |                            | 1           |
|                                               |                                  |                                  |                                  |                                  | 48                               | 34                               | 6                                |                                  |                                  |                                  |                            | 2           |
|                                               |                                  |                                  |                                  |                                  | 48                               | 34                               | 18                               |                                  |                                  |                                  |                            | 3           |
|                                               |                                  |                                  |                                  |                                  | 30                               | 46                               |                                  | 14                               |                                  |                                  |                            | 4           |
|                                               |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                                  |                                  |                                  |                            | 5           |
|                                               |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                                  |                                  |                                  |                            | 6           |
|                                               |                                  |                                  |                                  |                                  | 4                                |                                  |                                  |                                  |                                  |                                  |                            | 7           |
|                                               |                                  |                                  |                                  |                                  | 3                                |                                  |                                  |                                  |                                  |                                  |                            | 8           |
|                                               |                                  |                                  |                                  |                                  | 5                                | 4                                |                                  |                                  |                                  |                                  |                            | 9           |
|                                               |                                  |                                  |                                  |                                  | 6                                |                                  |                                  |                                  |                                  |                                  |                            | 10          |
|                                               |                                  |                                  |                                  |                                  | 4                                |                                  |                                  |                                  |                                  |                                  |                            | 11          |
|                                               |                                  |                                  |                                  |                                  | 5                                |                                  | 1                                |                                  |                                  |                                  |                            | 12          |
|                                               |                                  |                                  |                                  |                                  | 5                                |                                  | 1                                |                                  |                                  |                                  |                            | 13          |
|                                               |                                  |                                  |                                  |                                  | 5                                | 1                                |                                  |                                  |                                  |                                  |                            | 14          |
|                                               |                                  |                                  |                                  |                                  | 12                               | 4                                | 1                                |                                  |                                  |                                  |                            | 15          |
|                                               |                                  |                                  |                                  |                                  | 13                               |                                  | 1                                |                                  |                                  |                                  |                            | 16          |
|                                               |                                  |                                  |                                  |                                  | 15                               |                                  | 1                                |                                  |                                  |                                  |                            | 17          |
|                                               |                                  |                                  |                                  |                                  | 12                               | 1                                |                                  |                                  |                                  |                                  |                            | 18          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 19          |
|                                               |                                  |                                  | 8                                |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 20          |
|                                               |                                  |                                  | 8                                |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 21          |
|                                               |                                  |                                  | 8                                | 4                                |                                  |                                  |                                  |                                  |                                  |                                  |                            | 22          |
|                                               |                                  |                                  | 12                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 23          |
|                                               |                                  |                                  |                                  |                                  | 16                               | 8                                |                                  |                                  |                                  |                                  |                            | 24          |
|                                               |                                  |                                  |                                  |                                  | 4                                |                                  |                                  |                                  |                                  |                                  |                            | 25          |
|                                               |                                  |                                  |                                  |                                  | 16                               |                                  |                                  |                                  |                                  |                                  |                            | 26          |
|                                               |                                  |                                  |                                  |                                  | 4                                |                                  |                                  |                                  |                                  |                                  |                            | 27          |
|                                               |                                  |                                  |                                  |                                  | 16                               |                                  |                                  |                                  |                                  |                                  |                            | 28          |
|                                               |                                  |                                  | 12                               | 8                                |                                  |                                  |                                  |                                  |                                  |                                  |                            | 29          |
|                                               |                                  |                                  | 8                                | 8                                |                                  |                                  |                                  |                                  |                                  |                                  |                            | 30          |
|                                               |                                  |                                  | 8                                | 12                               |                                  |                                  |                                  |                                  |                                  |                                  |                            | 31          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 32          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 33          |
|                                               |                                  |                                  |                                  |                                  |                                  | 6                                |                                  |                                  |                                  |                                  |                            | 34          |
|                                               |                                  |                                  |                                  |                                  |                                  | 7                                |                                  |                                  |                                  |                                  |                            | 35          |
|                                               |                                  |                                  |                                  |                                  |                                  | 9                                |                                  |                                  |                                  |                                  |                            | 36          |
|                                               |                                  |                                  |                                  | 2                                | 3                                | 2                                |                                  |                                  |                                  |                                  |                            | 37          |
|                                               |                                  |                                  | 1                                | 5                                |                                  |                                  |                                  |                                  |                                  |                                  |                            | 38          |
|                                               |                                  |                                  |                                  |                                  |                                  | 8                                | 4                                | 6                                |                                  |                                  |                            | 39          |
|                                               |                                  |                                  |                                  |                                  |                                  | 8                                | 4                                | 6                                |                                  |                                  |                            | 40          |
|                                               |                                  |                                  |                                  |                                  |                                  | 10                               | 8                                | 9                                |                                  |                                  |                            | 41          |
|                                               |                                  |                                  |                                  |                                  |                                  | 23                               | 20                               |                                  |                                  |                                  |                            | 42          |
|                                               |                                  |                                  |                                  |                                  |                                  | 23                               | 10                               |                                  |                                  |                                  |                            |             |
|                                               |                                  |                                  |                                  |                                  |                                  | 30                               | 12                               |                                  |                                  |                                  |                            |             |

TABLE N.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—STANDARD

| Line No. | Occupation, District, and number of plants.              | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |     |                      |    |
|----------|----------------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|-----|----------------------|----|
|          |                                                          |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72  | Over 72 and under 84 | 84 |
| 1        | Inspectors—Concld. Total—<br>6 plants.....               | 1913  | 67                   | 71.6                              | \$0.244                         | \$17.46                            |                                                |                      |                 |    | 6                    | 61  |                      |    |
|          |                                                          | 1914  | 58                   | 70.9                              | .240                            | 16.95                              |                                                |                      |                 | 3  | 11                   | 44  |                      |    |
| 3        | 7 plants.....                                            | 1914  | 62                   | 70.5                              | .236                            | 16.65                              |                                                |                      |                 | 3  | 15                   | 44  |                      |    |
|          |                                                          | 1915  | 80                   | 71.5                              | .239                            | 17.11                              |                                                |                      |                 | 3  | 6                    | 65  | 6                    |    |
| 5        | Laborers: Eastern—<br>1 plant.....                       | 1913  | 27                   | 67.6                              | .160                            | 10.81                              |                                                |                      |                 | 10 |                      | 17  |                      |    |
|          |                                                          | 1914  | 18                   | 65.3                              | .160                            | 10.45                              |                                                |                      |                 | 10 |                      | 8   |                      |    |
| 7        | 2 plants.....                                            | 1914  | 45                   | 65.4                              | .157                            | 10.29                              |                                                |                      |                 | 10 | 27                   | 8   |                      |    |
|          |                                                          | 1915  | 56                   | 67.4                              | .161                            | 10.83                              |                                                |                      |                 | 10 | 22                   | 24  |                      |    |
| 9        | Pittsburgh—<br>2 plants.....                             | 1913  | 79                   | 70.9                              | .189                            | 13.39                              |                                                |                      |                 | 9  |                      | 68  |                      | 2  |
|          |                                                          | 1914  | 74                   | 70.5                              | .194                            | 13.68                              |                                                |                      |                 | 8  | 8                    | 58  |                      |    |
| 11       | G. L. and M. W.—<br>3 plants.....                        | 1915  | 164                  | 71.6                              | .184                            | 13.18                              |                                                |                      |                 | 6  |                      | 158 |                      |    |
|          |                                                          | 1913  | 156                  | 71.6                              | .191                            | 13.65                              |                                                |                      |                 | 6  |                      | 149 |                      | 1  |
| 12       | Total—<br>6 plants.....                                  | 1914  | 103                  | 71.3                              | .192                            | 13.67                              |                                                |                      |                 | 6  |                      | 97  |                      |    |
|          |                                                          | 1915  | 119                  | 72.0                              | .189                            | 13.64                              |                                                |                      |                 |    |                      | 119 |                      |    |
| 15       | 7 plants.....                                            | 1913  | 262                  | 71.0                              | .187                            | 13.28                              |                                                |                      |                 | 25 |                      | 234 |                      | 3  |
|          |                                                          | 1914  | 195                  | 70.5                              | .190                            | 13.38                              |                                                |                      |                 | 24 | 8                    | 163 |                      |    |
| 17       | Unclassified—productive:<br>Eastern—<br>2 plants.....    | 1914  | 222                  | 69.9                              | .185                            | 12.99                              |                                                |                      |                 | 24 | 35                   | 163 |                      |    |
|          |                                                          | 1915  | 339                  | 71.0                              | .182                            | 12.95                              |                                                |                      |                 | 16 | 22                   | 301 |                      |    |
| 19       | Pittsburgh—<br>2 plants.....                             | 1914  | 46                   | 69.9                              | .174                            | 12.17                              |                                                |                      |                 | 1  | 13                   | 32  |                      |    |
|          |                                                          | 1915  | 79                   | 71.2                              | .180                            | 12.78                              |                                                |                      |                 | 2  | 6                    | 71  |                      |    |
| 21       | G. L. and M. W.—<br>3 plants.....                        | 1914  | 93                   | 72.6                              | .219                            | 15.89                              |                                                |                      |                 | 3  |                      | 82  |                      | 8  |
|          |                                                          | 1915  | 126                  | 73.8                              | .217                            | 15.99                              |                                                |                      |                 | 3  |                      | 93  | 12                   | 18 |
| 23       | Total—<br>7 plants.....                                  | 1914  | 115                  | 71.4                              | .211                            | 15.01                              | 3                                              |                      |                 |    |                      | 112 |                      |    |
|          |                                                          | 1915  | 156                  | 71.7                              | .203                            | 14.52                              | 3                                              |                      |                 |    | 1                    | 149 |                      | 3  |
| 25       | Unclassified—nonproductive:<br>Eastern—<br>2 plants..... | 1914  | 254                  | 71.6                              | .207                            | 14.82                              | 3                                              |                      |                 | 4  | 13                   | 226 |                      | 8  |
|          |                                                          | 1915  | 361                  | 72.4                              | .203                            | 14.65                              | 3                                              |                      |                 | 5  | 7                    | 313 | 12                   | 21 |
| 27       | Pittsburgh—<br>2 plants.....                             | 1914  | 81                   | 69.7                              | .238                            | 16.49                              |                                                |                      |                 |    | 41                   | 34  |                      | 6  |
|          |                                                          | 1915  | 80                   | 69.8                              | .226                            | 15.69                              |                                                |                      |                 |    | 40                   | 34  |                      | 6  |
| 29       | G. L. and M. W.—<br>3 plants.....                        | 1914  | 99                   | 71.8                              | .229                            | 16.39                              |                                                | 1                    |                 | 16 | 19                   | 32  | 14                   | 17 |
|          |                                                          | 1915  | 78                   | 75.1                              | .249                            | 18.48                              |                                                |                      |                 | 4  | 19                   | 22  |                      | 33 |
| 31       | Total—<br>7 plants.....                                  | 1914  | 234                  | 72.4                              | .221                            | 15.97                              |                                                |                      | 6               |    | 30                   | 169 |                      | 29 |
|          |                                                          | 1915  | 232                  | 71.6                              | .221                            | 15.75                              |                                                |                      | 14              |    | 31                   | 161 | 8                    | 18 |
| 33       | Total—<br>7 plants.....                                  | 1914  | 414                  | 71.7                              | .226                            | 16.17                              |                                                | 1                    | 6               | 16 | 90                   | 235 | 14                   | 52 |
|          |                                                          | 1915  | 390                  | 71.9                              | .228                            | 16.29                              |                                                |                      | 14              | 4  | 90                   | 217 | 8                    | 57 |



AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
RAIL MILLS—Concluded.

| Employees whose rates of wages per hour were— |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 10<br>and<br>under<br>12<br>cts.              | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                  |                                  |                                  |                                  | 37                               | 24                               | 6                                |                                  |                                  |                                  |                            | 1           |
|                                               |                                  |                                  |                                  |                                  | 38                               | 14                               | 6                                |                                  |                                  |                                  |                            | 2           |
|                                               |                                  |                                  |                                  |                                  | 40                               | 14                               | 6                                |                                  |                                  |                                  |                            | 3           |
|                                               |                                  |                                  | 1                                | 2                                | 43                               | 22                               | 9                                |                                  |                                  |                                  |                            | 4           |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                  |                                  |                                  | 27                               |                                  |                                  |                                  |                                  |                                  |                                  |                            | 5           |
|                                               |                                  |                                  |                                  | 18                               |                                  |                                  |                                  |                                  |                                  |                                  |                            | 6           |
|                                               |                                  | 13                               |                                  | 32                               |                                  |                                  |                                  |                                  |                                  |                                  |                            | 7           |
|                                               |                                  |                                  |                                  | 56                               |                                  |                                  |                                  |                                  |                                  |                                  |                            | 8           |
|                                               |                                  |                                  |                                  | 30                               |                                  | 49                               |                                  |                                  |                                  |                                  |                            | 9           |
|                                               |                                  |                                  |                                  | 15                               |                                  | 59                               |                                  |                                  |                                  |                                  |                            | 10          |
|                                               |                                  |                                  |                                  | 86                               |                                  | 78                               |                                  |                                  |                                  |                                  |                            | 11          |
|                                               |                                  |                                  |                                  | 24                               | 132                              |                                  |                                  |                                  |                                  |                                  |                            | 12          |
|                                               |                                  |                                  |                                  | 14                               | 89                               |                                  |                                  |                                  |                                  |                                  |                            | 13          |
|                                               |                                  |                                  |                                  | 30                               | 89                               |                                  |                                  |                                  |                                  |                                  |                            | 14          |
|                                               |                                  |                                  |                                  | 81                               | 132                              | 49                               |                                  |                                  |                                  |                                  |                            | 15          |
|                                               |                                  |                                  |                                  | 47                               | 89                               | 59                               |                                  |                                  |                                  |                                  |                            | 16          |
|                                               |                                  | 13                               |                                  | 61                               | 89                               | 59                               |                                  |                                  |                                  |                                  |                            | 17          |
|                                               |                                  |                                  |                                  | 172                              | 89                               | 78                               |                                  |                                  |                                  |                                  |                            | 18          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                  | 3                                |                                  | 25                               | 12                               | 6                                |                                  |                                  |                                  |                                  |                            | 19          |
|                                               |                                  |                                  |                                  | 51                               | 19                               |                                  | 8                                | 1                                |                                  |                                  |                            | 20          |
|                                               |                                  |                                  |                                  | 6                                | 11                               | 62                               | 8                                | 6                                |                                  |                                  |                            | 21          |
|                                               |                                  |                                  |                                  | 10                               | 17                               | 77                               | 16                               | 4                                | 2                                |                                  |                            | 22          |
|                                               |                                  |                                  |                                  | 5                                | 49                               | 44                               | 14                               | 3                                |                                  |                                  |                            | 23          |
|                                               |                                  |                                  |                                  | 22                               | 77                               | 36                               | 18                               | 3                                |                                  |                                  |                            | 24          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                  | 3                                |                                  | 36                               | 72                               | 112                              | 22                               | 9                                |                                  |                                  |                            | 25          |
|                                               |                                  |                                  |                                  | 83                               | 113                              | 113                              | 42                               | 8                                | 2                                |                                  |                            | 26          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                  | 3                                |                                  | 20                               | 9                                | 16                               | 15                               | 18                               |                                  |                                  |                            | 27          |
|                                               |                                  | 12                               |                                  | 21                               | 11                               | 7                                | 6                                | 22                               | 1                                |                                  |                            | 28          |
|                                               |                                  |                                  |                                  | 5                                | 19                               | 51                               | 2                                | 22                               |                                  |                                  |                            | 29          |
|                                               |                                  |                                  |                                  | 1                                | 15                               | 35                               | 4                                | 23                               |                                  |                                  |                            | 30          |
|                                               |                                  |                                  |                                  | 4                                | 98                               | 81                               | 32                               | 18                               | 1                                |                                  |                            | 31          |
|                                               |                                  |                                  |                                  |                                  | 100                              | 85                               | 22                               | 24                               | 1                                |                                  |                            | 32          |
|                                               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                  | 3                                |                                  | 29                               | 126                              | 148                              | 49                               | 58                               | 1                                |                                  |                            | 33          |
|                                               |                                  | 12                               |                                  | 22                               | 126                              | 127                              | 32                               | 69                               | 2                                |                                  |                            | 34          |

## BAR MILLS.<sup>1</sup>

### SUMMARY.

The average rate of wages or earnings per hour in the bar-mill department in 1915 was from 1 to 16 per cent higher than in any one of the 8 years preceding, except 1913, which was a year of such large production that a general increase in time and piece rates was made by practically all companies. There was no decrease in rates of pay in 1915, as compared with 1913, but the lower production reduced the average hourly earnings 4 per cent as compared with 1913. Beginning with 1907, a prosperous year in this industry, bar-mill employees, as shown by their average earnings per hour, have had one good year followed by two poor years in each 3-year period. The years 1907, 1910, and 1913 were prosperous years, as shown by the figures of this report, while in 1908, 1909, 1911, 1912, 1914, and 1915, lower production considerably reduced average hourly rates of wages, and consequently the average full-time weekly earnings in proportion. To complete the analogy, the statements published on pages 10 to 14 indicate that 1916 figures when computed will show a very substantial increase in earnings per hour and per week.

The most significant facts appearing in this chapter concerning wages and hours of labor of bar-mill employees, for the years 1907 to 1915, are summarized by means of averages and percentages in Table 34. The information for 1915 represents 8,732 men, and was obtained from 57 plants having 128 separate bar mills, of various sizes from 8 to 18 inches, inclusive, being 23 per cent of the bar mills in the United States. Of the 8,732 employees 7,220 are in the 18 principal productive occupations reported for the years 1907 to 1913, and the remaining 1,512 are in the unclassified productive and non-productive groups reported for the years 1914 and 1915 only.

The bar mills considered in this report are, with a few exceptions, hand-operated mills—the exceptions being certain mills using a combination of continuous rolls and rolls in which the material is handled by men, and include both mills rolling bar iron and those rolling bar steel.

In this summary table occupations are grouped according to the wages paid, beginning with the lowest-paid group, and the occupations in each group are presented in alphabetical order. Classified full-time hours per week and rates of wages per hour are shown by percentages which were computed from the actual figures given in Table O.

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<sup>1</sup> Summary figures relating to this department are given with figures for other departments of the iron and steel industry on pages 7 to 26; an account of the volume of employment in this and other departments from July, 1913, to June, 1915, is given on pages 26 to 55; and an explanation of the scope of the investigation and of the methods employed is given on pages 55 to 59.

TABLE 34.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1907 TO 1915—BAR MILLS.

[The figures for each group of years are for identical plants.]

| Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                          |                      |       |         | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                      | Average full-time weekly earnings. |
|-----------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|--------------------------|----------------------|-------|---------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|----------------------|------------------------------------|
|                                   |       |                      |                                   | 48 and under.                                              | Over 48 and including 60 | Over 60 and under 72 | 72    | Over 72 |                                 | Under 14 cts.                                       | 14 and under 16 cts. | 16 and under 18 cts. | 18 and under 20 cts. | 20 and under 25 cts. |                                    |
|                                   |       |                      |                                   |                                                            |                          |                      |       |         |                                 |                                                     |                      |                      |                      |                      |                                    |
| Laborers:                         |       |                      |                                   |                                                            |                          |                      |       |         |                                 |                                                     |                      |                      |                      |                      |                                    |
| 10 plants.....                    | 1907  | 296                  | 68.3                              | .....                                                      | 18                       | 47                   | 25    | 10      | \$0.153                         | 9                                                   | 58                   | 32                   | .....                | .....                | \$10.44                            |
|                                   | 1908  | 227                  | 64.8                              | .....                                                      | 42                       | 48                   | 8     | 2       | .153                            | 17                                                  | 40                   | 43                   | .....                | .....                | 9.93                               |
|                                   | 1909  | 324                  | 67.8                              | .....                                                      | 24                       | 42                   | 27    | 7       | .150                            | 15                                                  | 56                   | 28                   | .....                | .....                | 10.17                              |
|                                   | 1910  | 424                  | 67.2                              | .....                                                      | 30                       | 27                   | 42    | 2       | .161                            | 9                                                   | 7                    | 83                   | .....                | .....                | 10.81                              |
| 15 plants.....                    | 1910  | 511                  | 67.8                              | .....                                                      | 31                       | 25                   | 36    | 8       | .160                            | 10                                                  | 14                   | 76                   | .....                | .....                | 10.86                              |
|                                   | 1911  | 355                  | 66.0                              | .....                                                      | 29                       | 49                   | 20    | 2       | .160                            | 12                                                  | 7                    | 80                   | .....                | .....                | 10.59                              |
| 17 plants.....                    | 1911  | 390                  | 65.5                              | .....                                                      | 35                       | 45                   | 18    | 2       | .159                            | 11                                                  | 16                   | 73                   | .....                | .....                | 10.40                              |
|                                   | 1912  | 424                  | 65.9                              | .....                                                      | 30                       | 48                   | 20    | 2       | .159                            | 10                                                  | 13                   | 77                   | .....                | .....                | 10.52                              |
| 21 plants.....                    | 1912  | 536                  | 65.0                              | .....                                                      | 37                       | 43                   | 18    | 2       | .160                            | 14                                                  | 11                   | 72                   | 3                    | .....                | 10.38                              |
|                                   | 1913  | 705                  | 64.3                              | .....                                                      | 46                       | 44                   | 4     | 7       | .178                            | 14                                                  | 7                    | 49                   | 34                   | 9                    | 11.51                              |
| 42 plants.....                    | 1913  | 891                  | 62.5                              | (1)                                                        | 59                       | 33                   | 2     | 5       | .169                            | 12                                                  | 16                   | 39                   | 23                   | 9                    | 10.66                              |
|                                   | 1914  | 796                  | 63.6                              | (1)                                                        | 52                       | 38                   | 7     | 3       | .168                            | 13                                                  | 18                   | 40                   | 21                   | 8                    | 10.75                              |
| 54 plants.....                    | 1914  | 1,039                | 63.3                              | 1                                                          | 48                       | 42                   | 7     | 2       | .173                            | 10                                                  | 14                   | 37                   | 20                   | 18                   | 11.00                              |
|                                   | 1915  | 1,029                | 62.9                              | 1                                                          | 48                       | 41                   | 8     | 1       | .173                            | 10                                                  | 17                   | 31                   | 22                   | 20                   | 10.91                              |
|                                   |       |                      |                                   |                                                            |                          |                      |       |         |                                 | Under 16 cts.                                       | 16 and under 20 cts. | 20 and under 25 cts. | 25 and under 30 cts. | 30 cts. and over.    |                                    |
| Bundlers:                         |       |                      |                                   |                                                            |                          |                      |       |         |                                 |                                                     |                      |                      |                      |                      |                                    |
| 5 plants.....                     | 1907  | 41                   | 66.9                              | .....                                                      | .....                    | 76                   | 24    | .....   | .202                            | .....                                               | 56                   | 39                   | 2                    | 2                    | 13.53                              |
|                                   | 1908  | 41                   | 66.9                              | .....                                                      | .....                    | 76                   | 24    | .....   | .174                            | 34                                                  | 56                   | 7                    | 2                    | .....                | 11.63                              |
|                                   | 1909  | 41                   | 66.8                              | .....                                                      | .....                    | 100                  | ..... | .....   | .186                            | 10                                                  | 76                   | 15                   | .....                | .....                | 12.42                              |
|                                   | 1910  | 41                   | 67.1                              | .....                                                      | .....                    | 100                  | ..... | .....   | .213                            | 5                                                   | 27                   | 63                   | 5                    | .....                | 14.23                              |
| 6 plants.....                     | 1910  | 77                   | 66.1                              | .....                                                      | .....                    | 100                  | ..... | .....   | .207                            | 3                                                   | 43                   | 52                   | 3                    | .....                | 13.69                              |
|                                   | 1911  | 81                   | 63.5                              | .....                                                      | 44                       | 56                   | ..... | .....   | .193                            | 1                                                   | 59                   | 37                   | 3                    | .....                | 12.28                              |
| 7 plants.....                     | 1911  | 131                  | 62.0                              | .....                                                      | 66                       | 34                   | ..... | .....   | .197                            | 1                                                   | 37                   | 61                   | 2                    | .....                | 12.20                              |
|                                   | 1912  | 132                  | 62.0                              | .....                                                      | 65                       | 35                   | ..... | .....   | .193                            | .....                                               | 80                   | 18                   | 2                    | .....                | 11.94                              |
| 7 plants.....                     | 1912  | 129                  | 61.6                              | .....                                                      | 71                       | 29                   | ..... | .....   | .194                            | .....                                               | 80                   | 19                   | 2                    | .....                | 11.96                              |
|                                   | 1913  | 136                  | 61.4                              | .....                                                      | 72                       | 28                   | ..... | .....   | .228                            | .....                                               | 2                    | 88                   | 9                    | 2                    | 14.05                              |
| 12 plants.....                    | 1913  | 178                  | 61.4                              | .....                                                      | 73                       | 27                   | ..... | .....   | .218                            | 3                                                   | 16                   | 73                   | 7                    | 1                    | 13.38                              |
|                                   | 1914  | 168                  | 64.1                              | .....                                                      | 45                       | 55                   | ..... | .....   | .203                            | 5                                                   | 44                   | 49                   | 1                    | 1                    | 13.00                              |
| 13 plants.....                    | 1914  | 178                  | 63.9                              | .....                                                      | 45                       | 55                   | ..... | .....   | .203                            | 5                                                   | 42                   | 52                   | 1                    | 1                    | 12.97                              |
|                                   | 1915  | 210                  | 64.4                              | .....                                                      | 38                       | 58                   | 4     | .....   | .208                            | 2                                                   | 51                   | 37                   | 10                   | (1)                  | 13.38                              |
| Chargers and helpers:             |       |                      |                                   |                                                            |                          |                      |       |         |                                 |                                                     |                      |                      |                      |                      |                                    |
| 12 plants.....                    | 1907  | 104                  | 65.5                              | .....                                                      | 14                       | 68                   | 15    | 2       | .173                            | 48                                                  | 37                   | 10                   | 5                    | 1                    | 11.34                              |
|                                   | 1908  | 102                  | 65.6                              | .....                                                      | 15                       | 66                   | 20    | .....   | .161                            | 60                                                  | 35                   | 5                    | .....                | .....                | 10.56                              |
|                                   | 1909  | 107                  | 65.9                              | .....                                                      | 13                       | 75                   | 8     | 5       | .161                            | 63                                                  | 30                   | 8                    | .....                | .....                | 10.60                              |
|                                   | 1910  | 110                  | 66.3                              | .....                                                      | 13                       | 78                   | 9     | .....   | .181                            | 22                                                  | 62                   | 9                    | 7                    | .....                | 11.87                              |
| 18 plants.....                    | 1910  | 179                  | 65.3                              | 7                                                          | 15                       | 59                   | 20    | .....   | .192                            | 13                                                  | 59                   | 14                   | 13                   | .....                | 12.40                              |
|                                   | 1911  | 177                  | 65.1                              | 7                                                          | 15                       | 60                   | 19    | .....   | .185                            | 22                                                  | 53                   | 22                   | 3                    | 1                    | 12.02                              |
| 19 plants.....                    | 1911  | 185                  | 64.8                              | 7                                                          | 16                       | 60                   | 18    | .....   | .184                            | 23                                                  | 53                   | 21                   | 3                    | 1                    | 11.90                              |
|                                   | 1912  | 182                  | 65.0                              | 5                                                          | 16                       | 61                   | 18    | .....   | .192                            | 13                                                  | 58                   | 15                   | 13                   | 1                    | 12.45                              |
| 19 plants.....                    | 1912  | 181                  | 64.3                              | 7                                                          | 25                       | 49                   | 20    | .....   | .199                            | 12                                                  | 50                   | 22                   | 15                   | 1                    | 12.72                              |
|                                   | 1913  | 185                  | 63.7                              | .....                                                      | 32                       | 60                   | 9     | .....   | .224                            | 1                                                   | 43                   | 35                   | 12                   | 9                    | 14.17                              |
| 31 plants.....                    | 1913  | 262                  | 62.5                              | 4                                                          | 29                       | 63                   | 3     | 1       | .226                            | 2                                                   | 41                   | 32                   | 15                   | 10                   | 14.00                              |
|                                   | 1914  | 233                  | 62.2                              | 4                                                          | 31                       | 62                   | 2     | 1       | .220                            | 2                                                   | 36                   | 41                   | 15                   | 6                    | 13.58                              |
| 41 plants.....                    | 1914  | 346                  | 61.9                              | 4                                                          | 32                       | 62                   | 1     | 1       | .219                            | 4                                                   | 29                   | 46                   | 16                   | 5                    | 13.47                              |
|                                   | 1915  | 333                  | 61.7                              | 9                                                          | 27                       | 62                   | 2     | 1       | .222                            | 6                                                   | 32                   | 38                   | 14                   | 11                   | 13.56                              |

<sup>1</sup> Less than one-half of 1 per cent.

# 304 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

TABLE 34.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1907 TO 1915—*BAR MILLS*—Continued.

| Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                          |                      |       |         | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                   | Average full-time weekly earnings. |
|-----------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|--------------------------|----------------------|-------|---------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|-------------------|------------------------------------|
|                                   |       |                      |                                   | 48 and under.                                              | Over 48 and including 60 | Over 60 and under 72 | 72    | Over 72 |                                 | Under 16 cts.                                       | 16 and under 20 cts. | 20 and under 25 cts. | 25 and under 30 cts. | 30 cts. and over. |                                    |
| <b>Hotbed men:</b>                |       |                      |                                   |                                                            |                          |                      |       |         |                                 |                                                     |                      |                      |                      |                   |                                    |
| 15 plants.....                    | 1907  | 302                  | 63.3                              | 4                                                          | 34                       | 43                   | 19    | .....   | \$0.189                         | 42                                                  | 26                   | 20                   | 6                    | 7                 | \$11.98                            |
|                                   | 1908  | 299                  | 63.2                              | 4                                                          | 35                       | 21                   | ..... | .....   | .174                            | 48                                                  | 34                   | 12                   | 4                    | 2                 | 10.93                              |
|                                   | 1909  | 286                  | 63.3                              | 4                                                          | 37                       | 54                   | 5     | .....   | .180                            | 43                                                  | 30                   | 19                   | 3                    | 5                 | 11.00                              |
|                                   | 1910  | 302                  | 63.3                              | 5                                                          | 35                       | 54                   | 7     | .....   | .208                            | 20                                                  | 41                   | 19                   | 12                   | 8                 | 13.02                              |
| 25 plants.....                    | 1910  | 500                  | 62.9                              | 11                                                         | 30                       | 43                   | 12    | 3       | .200                            | 26                                                  | 40                   | 17                   | 11                   | 6                 | 12.46                              |
|                                   | 1911  | 434                  | 62.0                              | 12                                                         | 30                       | 48                   | 10    | .....   | .189                            | 30                                                  | 42                   | 15                   | 6                    | 7                 | 11.69                              |
| 26 plants.....                    | 1911  | 450                  | 61.9                              | 12                                                         | 30                       | 48                   | 9     | .....   | .188                            | 31                                                  | 42                   | 14                   | 6                    | 7                 | 11.61                              |
|                                   | 1912  | 461                  | 61.7                              | 12                                                         | 32                       | 45                   | 11    | .....   | .192                            | 22                                                  | 43                   | 22                   | 8                    | 5                 | 11.80                              |
| 26 plants.....                    | 1912  | 455                  | 61.5                              | 12                                                         | 35                       | 43                   | 10    | .....   | .192                            | 20                                                  | 46                   | 22                   | 8                    | 5                 | 11.73                              |
|                                   | 1913  | 467                  | 60.9                              | 3                                                          | 43                       | 50                   | 5     | .....   | .221                            | 9                                                   | 34                   | 36                   | 13                   | 8                 | 13.43                              |
| 43 plants.....                    | 1913  | 600                  | 60.3                              | 7                                                          | 45                       | 45                   | 4     | .....   | .217                            | 13                                                  | 30                   | 37                   | 13                   | 8                 | 13.06                              |
|                                   | 1914  | 573                  | 60.6                              | 6                                                          | 41                       | 47                   | 5     | .....   | .209                            | 14                                                  | 34                   | 32                   | 17                   | 4                 | 12.61                              |
| 56 plants.....                    | 1914  | 714                  | 60.3                              | 5                                                          | 44                       | 47                   | 4     | .....   | .213                            | 12                                                  | 32                   | 35                   | 18                   | 4                 | 12.77                              |
|                                   | 1915  | 721                  | 60.0                              | 14                                                         | 34                       | 43                   | 8     | .....   | .216                            | 9                                                   | 32                   | 37                   | 14                   | 7                 | 12.83                              |
| <b>Roll engineers:</b>            |       |                      |                                   |                                                            |                          |                      |       |         |                                 |                                                     |                      |                      |                      |                   |                                    |
| 13 plants.....                    | 1907  | 58                   | 72.3                              | .....                                                      | .....                    | 53                   | 9     | 38      | .226                            | .....                                               | 16                   | 57                   | 28                   | .....             | 16.29                              |
|                                   | 1908  | 56                   | 71.4                              | .....                                                      | .....                    | 50                   | 18    | 32      | .221                            | .....                                               | 18                   | 63                   | 20                   | .....             | 15.76                              |
|                                   | 1909  | 56                   | 71.5                              | .....                                                      | .....                    | 54                   | 11    | 36      | .217                            | 7                                                   | 21                   | 54                   | 18                   | .....             | 15.52                              |
|                                   | 1910  | 58                   | 71.7                              | .....                                                      | .....                    | 55                   | 7     | 38      | .230                            | .....                                               | 14                   | 62                   | 24                   | .....             | 16.52                              |
| 22 plants.....                    | 1910  | 99                   | 72.0                              | .....                                                      | 3                        | 40                   | 26    | 30      | .229                            | .....                                               | 14                   | 60                   | 26                   | .....             | 16.46                              |
|                                   | 1911  | 95                   | 70.4                              | .....                                                      | 3                        | 57                   | 14    | 26      | .228                            | .....                                               | 15                   | 62                   | 23                   | .....             | 16.07                              |
|                                   | 1912  | 97                   | 70.0                              | .....                                                      | 5                        | 53                   | 12    | 30      | .229                            | .....                                               | 13                   | 65                   | 22                   | .....             | 16.05                              |
| 20 plants.....                    | 1912  | 93                   | 70.1                              | .....                                                      | 5                        | 53                   | 13    | 29      | .228                            | .....                                               | 14                   | 66                   | 20                   | .....             | 16.02                              |
|                                   | 1913  | 97                   | 70.5                              | .....                                                      | 8                        | 40                   | 9     | 42      | .249                            | .....                                               | 4                    | 31                   | 59                   | 6                 | 17.56                              |
| 41 plants.....                    | 1913  | 153                  | 69.2                              | .....                                                      | 13                       | 45                   | 16    | 26      | .247                            | 1                                                   | 12                   | 25                   | 48                   | 14                | 17.06                              |
|                                   | 1914  | 149                  | 68.7                              | .....                                                      | 13                       | 44                   | 24    | 19      | .248                            | 1                                                   | 11                   | 25                   | 45                   | 17                | 17.02                              |
| 52 pants.....                     | 1914  | 183                  | 68.8                              | .....                                                      | 11                       | 47                   | 26    | 15      | .247                            | 1                                                   | 12                   | 28                   | 42                   | 17                | 16.97                              |
|                                   | 1915  | 178                  | 68.6                              | .....                                                      | 10                       | 49                   | 27    | 14      | .246                            | 3                                                   | 12                   | 26                   | 42                   | 16                | 16.77                              |
| <b>Shearmen's helpers:</b>        |       |                      |                                   |                                                            |                          |                      |       |         |                                 |                                                     |                      |                      |                      |                   |                                    |
| 15 plants.....                    | 1907  | 201                  | 65.9                              | .....                                                      | 16                       | 62                   | 20    | 1       | .174                            | 49                                                  | 30                   | 14                   | 6                    | 1                 | 11.46                              |
|                                   | 1908  | 172                  | 66.2                              | .....                                                      | 20                       | 59                   | 17    | 5       | .168                            | 54                                                  | 31                   | 12                   | 2                    | 1                 | 11.07                              |
|                                   | 1909  | 185                  | 67.3                              | .....                                                      | 21                       | 60                   | 4     | 16      | .169                            | 55                                                  | 27                   | 15                   | 3                    | 1                 | 11.32                              |
|                                   | 1910  | 215                  | 65.3                              | .....                                                      | 23                       | 65                   | 12    | .....   | .184                            | 31                                                  | 38                   | 22                   | 7                    | 1                 | 12.00                              |
| 23 plants.....                    | 1910  | 355                  | 64.7                              | 13                                                         | 15                       | 45                   | 22    | 6       | .187                            | 27                                                  | 39                   | 25                   | 6                    | 4                 | 12.02                              |
|                                   | 1911  | 359                  | 63.8                              | 13                                                         | 18                       | 50                   | 18    | .....   | .178                            | 28                                                  | 50                   | 16                   | 5                    | 1                 | 11.28                              |
|                                   | 1912  | 358                  | 63.9                              | 13                                                         | 19                       | 46                   | 18    | 3       | .184                            | 18                                                  | 48                   | 26                   | 7                    | 1                 | 11.74                              |
| 22 plants.....                    | 1912  | 337                  | 63.4                              | 15                                                         | 20                       | 47                   | 14    | 4       | .183                            | 18                                                  | 49                   | 24                   | 8                    | 1                 | 11.52                              |
|                                   | 1913  | 316                  | 62.8                              | .....                                                      | 34                       | 61                   | 1     | 3       | .214                            | 11                                                  | 34                   | 36                   | 7                    | 11                | 13.30                              |
| 85 plants.....                    | 1913  | 418                  | 62.7                              | 4                                                          | 30                       | 61                   | 3     | 2       | .209                            | 17                                                  | 32                   | 32                   | 10                   | 9                 | 12.98                              |
|                                   | 1914  | 377                  | 62.9                              | 4                                                          | 27                       | 62                   | 7     | .....   | .198                            | 20                                                  | 36                   | 33                   | 6                    | 5                 | 12.43                              |
| 48 plants.....                    | 1914  | 487                  | 62.7                              | 3                                                          | 30                       | 63                   | 5     | .....   | .261                            | 15                                                  | 37                   | 37                   | 6                    | 5                 | 12.57                              |
|                                   | 1915  | 471                  | 62.3                              | 10                                                         | 24                       | 60                   | 7     | .....   | .203                            | 13                                                  | 33                   | 40                   | 8                    | 3                 | 12.66                              |
| <b>Stockers:</b>                  |       |                      |                                   |                                                            |                          |                      |       |         |                                 |                                                     |                      |                      |                      |                   |                                    |
| 8 plants.....                     | 1907  | 93                   | 64.4                              | .....                                                      | 17                       | 70                   | 19    | 4       | .178                            | 9                                                   | 68                   | 24                   | .....                | .....             | 11.43                              |
|                                   | 1908  | 90                   | 64.1                              | .....                                                      | 20                       | 66                   | 4     | .....   | .167                            | 29                                                  | 62                   | 9                    | .....                | .....             | 10.72                              |
|                                   | 1909  | 88                   | 64.2                              | .....                                                      | 18                       | 78                   | 3     | .....   | .168                            | 40                                                  | 47                   | 11                   | 2                    | .....             | 10.79                              |
|                                   | 1910  | 87                   | 64.3                              | .....                                                      | 17                       | 79                   | 3     | .....   | .190                            | 8                                                   | 60                   | 32                   | .....                | .....             | 12.17                              |
| 13 plants.....                    | 1910  | 170                  | 59.0                              | 16                                                         | 29                       | 51                   | 5     | .....   | .250                            | 4                                                   | 31                   | 30                   | 14                   | 22                | 14.24                              |
|                                   | 1911  | 164                  | 59.6                              | 17                                                         | 37                       | 43                   | 4     | .....   | .230                            | 4                                                   | 37                   | 27                   | 12                   | 21                | 13.41                              |
| 15 plants.....                    | 1911  | 211                  | 60.9                              | 13                                                         | 40                       | 34                   | 13    | .....   | .217                            | 3                                                   | 49                   | 23                   | 9                    | 17                | 12.94                              |
|                                   | 1912  | 217                  | 60.9                              | 12                                                         | 44                       | 31                   | 13    | .....   | .231                            | 3                                                   | 36                   | 26                   | 17                   | 17                | 13.79                              |
| 17 plants.....                    | 1912  | 215                  | 60.9                              | 13                                                         | 40                       | 34                   | 13    | .....   | .232                            | 3                                                   | 35                   | 27                   | 18                   | 17                | 13.88                              |
|                                   | 1913  | 226                  | 60.6                              | .....                                                      | 52                       | 45                   | 3     | .....   | .253                            | 1                                                   | 27                   | 27                   | 21                   | 24                | 15.12                              |

TABLE 34.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS—1907 TO 1915—BAR MILLS—Continued.

| Occupation, and number of plants.             | Year.                        | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                          |                      |                     |                                  |                              | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                          |                                  | Average full-time weekly earnings. |
|-----------------------------------------------|------------------------------|----------------------|-----------------------------------|------------------------------------------------------------|--------------------------|----------------------|---------------------|----------------------------------|------------------------------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|--------------------------|----------------------------------|------------------------------------|
|                                               |                              |                      |                                   | 48 and under.                                              | Over 48 and including 60 | Over 60 and under 72 | 72                  | Over 72                          | Under 16 cts.                |                                 | 16 and under 20 cts.                                | 20 and under 25 cts. | 25 and under 30 cts. | 30 cts. and over.        |                                  |                                    |
|                                               |                              |                      |                                   |                                                            |                          |                      |                     |                                  |                              |                                 |                                                     |                      |                      |                          |                                  |                                    |
| Stockers—Concluded.<br>31 plants.....         | 1913<br>1914                 | 374<br>343           | 60.2<br>59.9                      | 4<br>4                                                     | 59<br>54                 | 36<br>41             | 1<br>1              | .....<br>.....                   | \$0.216<br>.207              | 10<br>11                        | 31<br>33                                            | 34<br>38             | 16<br>13             | 9<br>4                   | \$12.89<br>12.34                 |                                    |
| 41 plants.....                                | 1914<br>1915                 | 603<br>582           | 60.4<br>60.2                      | 2<br>1                                                     | 51<br>55                 | 43<br>39             | 4<br>4              | .....<br>.....                   | .199<br>.198                 | 13<br>14                        | 38<br>36                                            | 38<br>40             | 8<br>5               | 2<br>5                   | 12.00<br>11.91                   |                                    |
| Unclassified—productive:<br>43 plants.....    | 1914<br>1915                 | 392<br>419           | 63.6<br>63.3                      | 3<br>2                                                     | 35<br>37                 | 48<br>44             | 11<br>15            | 3<br>2                           | .201<br>.205                 | 17<br>17                        | 23<br>23                                            | 49<br>47             | 9<br>6               | 2<br>7                   | 12.63<br>13.05                   |                                    |
| Unclassified—nonproductive:<br>43 plants..... | 1914<br>1915                 | 1,087<br>1,093       | 65.3<br>63.7                      | (1)<br>(1)                                                 | 48<br>61                 | 21<br>15             | 16<br>15            | 14<br>9                          | .206<br>.208                 | 14<br>14                        | 37<br>30                                            | 31<br>36             | 10<br>12             | 8<br>8                   | 13.38<br>13.23                   |                                    |
|                                               |                              |                      |                                   |                                                            |                          |                      |                     |                                  |                              |                                 | Under 20 cts.                                       | 20 and under 30 cts. | 30 and under 40 cts. | 40 and under 50 cts.     | 50 cts. and over.                |                                    |
| Drag-downs:<br>11 plants.....                 | 1907<br>1908<br>1909<br>1910 | 86<br>82<br>83<br>89 | 64.4<br>63.9<br>64.0<br>64.0      | .....<br>.....<br>.....<br>.....                           | 19<br>24<br>24<br>23     | 61<br>52<br>70<br>70 | 19<br>23<br>4<br>3  | 2<br>.....<br>2<br>5             | .271<br>.246<br>.250<br>.286 | 27<br>40<br>33<br>29            | 38<br>34<br>41<br>35                                | 23<br>18<br>22<br>27 | 7<br>.....<br>5<br>5 | 5<br>7<br>.....<br>5     | 17.31<br>15.58<br>15.93<br>18.19 |                                    |
| 19 plants.....                                | 1910<br>1911                 | 132<br>123           | 65.1<br>64.9                      | .....<br>.....                                             | 21<br>23                 | 57<br>55             | 19<br>20            | 3<br>2                           | .269<br>.262                 | 26<br>19                        | 46<br>63                                            | 22<br>12             | 3<br>3               | 3<br>3                   | 17.44<br>16.88                   |                                    |
| 20 plants.....                                | 1911<br>1912                 | 127<br>130           | 64.7<br>64.3                      | .....<br>.....                                             | 24<br>25                 | 55<br>54             | 20<br>19            | 2<br>2                           | .262<br>.253                 | 18<br>28                        | 64<br>45                                            | 12<br>22             | 3<br>6               | 3<br>.....               | 16.78<br>16.12                   |                                    |
| 20 plants.....                                | 1912<br>1913                 | 121<br>124           | 63.8<br>63.1                      | .....<br>.....                                             | 36<br>36                 | 45<br>55             | 17<br>7             | 2<br>2                           | .251<br>.281                 | 25<br>11                        | 52<br>52                                            | 20<br>28             | 3<br>9               | .....<br>.....           | 15.81<br>17.57                   |                                    |
| 33 plants.....                                | 1913<br>1914                 | 186<br>174           | 60.8<br>60.7                      | 9<br>10                                                    | 38<br>40                 | 44<br>41             | 7<br>9              | 2<br>1                           | .282<br>.272                 | 13<br>17                        | 43<br>44                                            | 35<br>30             | 9<br>9               | .....<br>.....           | 16.98<br>16.26                   |                                    |
| 45 plants.....                                | 1914<br>1915                 | 265<br>256           | 60.7<br>61.1                      | 6<br>5                                                     | 38<br>36                 | 49<br>51             | 6<br>7              | 1<br>1                           | .277<br>.280                 | 12<br>13                        | 47<br>49                                            | 32<br>30             | 8<br>6               | .....<br>2               | 16.58<br>16.96                   |                                    |
| Finishers:<br>10 plants.....                  | 1907<br>1908<br>1909<br>1910 | 65<br>63<br>63<br>64 | 65.9<br>66.4<br>66.2<br>66.1      | .....<br>.....<br>.....<br>.....                           | 26<br>24<br>22<br>20     | 48<br>49<br>68<br>75 | 26<br>27<br>10<br>5 | .....<br>.....<br>.....<br>..... | .309<br>.279<br>.300<br>.329 | 9<br>11<br>8<br>5               | 48<br>60<br>49<br>34                                | 19<br>19<br>27<br>39 | 20<br>10<br>16<br>16 | 5<br>.....<br>.....<br>6 | 20.45<br>18.53<br>19.85<br>21.80 |                                    |
| 17 plants.....                                | 1910<br>1911                 | 111<br>110           | 64.0<br>63.4                      | 14<br>14                                                   | 16<br>23                 | 55<br>46             | 15<br>18            | .....<br>.....                   | .323<br>.309                 | 5<br>6                          | 42<br>42                                            | 32<br>36             | 14<br>13             | 6<br>3                   | 20.48<br>19.50                   |                                    |
| 19 plants.....                                | 1911<br>1912                 | 121<br>126           | 62.8<br>62.5                      | 12<br>12                                                   | 26<br>29                 | 45<br>44             | 17<br>16            | .....<br>.....                   | .313<br>.319                 | 7<br>7                          | 39<br>47                                            | 35<br>27             | 17<br>12             | 3<br>7                   | 19.60<br>19.92                   |                                    |
| 21 plants.....                                | 1912<br>1913                 | 137<br>184           | 62.0<br>61.8                      | 11<br>.....                                                | 38<br>50                 | 38<br>43             | 13<br>8             | .....<br>.....                   | .328<br>.363                 | 7<br>5                          | 42<br>28                                            | 31<br>37             | 11<br>14             | 10<br>16                 | 20.29<br>22.36                   |                                    |
| 40 plants.....                                | 1913<br>1914                 | 182<br>173           | 59.6<br>60.0                      | .....<br>.....                                             | 63<br>52                 | 35<br>46             | 2<br>2              | .....<br>.....                   | .350<br>.330                 | 8<br>12                         | 29<br>30                                            | 33<br>33             | 18<br>17             | 12<br>8                  | 20.77<br>19.64                   |                                    |
| 54 plants.....                                | 1914<br>1915                 | 223<br>222           | 60.0<br>59.8                      | .....<br>.....                                             | 45<br>49                 | 55<br>51             | .....<br>.....      | .....<br>.....                   | .341<br>.352                 | 10<br>8                         | 28<br>27                                            | 31<br>32             | 21<br>21             | 9<br>11                  | 20.42<br>20.95                   |                                    |

<sup>1</sup> Less than one-half of 1 per cent.

# 306 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

TABLE 34.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1907 TO 1915—*BAR MILLS*—Continued.

| Occupation, and number of plants.   | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                          |                      |      |         | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                   | Average full-time weekly earnings. |
|-------------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|--------------------------|----------------------|------|---------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|-------------------|------------------------------------|
|                                     |       |                      |                                   | 48 and under.                                              | Over 48 and including 60 | Over 60 and under 72 | 72   | Over 72 |                                 | Under 20 cts.                                       | 20 and under 30 cts. | 30 and under 40 cts. | 40 and under 50 cts. | 50 cts. and over. |                                    |
|                                     |       |                      |                                   |                                                            |                          |                      |      |         |                                 |                                                     |                      |                      |                      |                   |                                    |
| Heaters' helpers:<br>14 plants..... | 1907  | 167                  | 65.3                              | 2                                                          | 14                       | 65                   | 16   | 4       | \$0.246                         | 44                                                  | 35                   | 14                   | 5                    | 2                 | \$15.77                            |
|                                     | 1908  | 153                  | 65.1                              | 2                                                          | 18                       | 56                   | 21   | 3       | .227                            | 54                                                  | 29                   | 12                   | 3                    | 1                 | 14.50                              |
|                                     | 1909  | 151                  | 65.0                              | 2                                                          | 19                       | 74                   | 1    | 4       | .234                            | 46                                                  | 39                   | 11                   | 3                    | 1                 | 14.87                              |
|                                     | 1910  | 166                  | 65.2                              | 2                                                          | 17                       | 75                   | 2    | 5       | .262                            | 25                                                  | 52                   | 11                   | 7                    | 6                 | 16.70                              |
| 24 plants.....                      | 1910  | 295                  | 62.6                              | 16                                                         | 18                       | 52                   | 11   | 3       | .273                            | 20                                                  | 47                   | 25                   | 4                    | 4                 | 16.77                              |
|                                     | 1911  | 281                  | 62.5                              | 17                                                         | 16                       | 53                   | 11   | 3       | .262                            | 22                                                  | 51                   | 20                   | 4                    | 4                 | 16.05                              |
| 25 plants.....                      | 1911  | 293                  | 62.7                              | 16                                                         | 15                       | 55                   | 10   | 3       | .259                            | 23                                                  | 50                   | 20                   | 3                    | 3                 | 15.94                              |
|                                     | 1912  | 319                  | 62.2                              | 14                                                         | 25                       | 51                   | 9    | 1       | .260                            | 23                                                  | 50                   | 20                   | 5                    | 2                 | 16.01                              |
| 24 plants.....                      | 1912  | 318                  | 61.9                              | 14                                                         | 31                       | 47                   | 6    | 1       | .251                            | 26                                                  | 51                   | 21                   | 3                    | ....              | 15.41                              |
|                                     | 1913  | 324                  | 62.0                              | 1                                                          | 44                       | 50                   | 3    | 1       | .273                            | 17                                                  | 53                   | 24                   | 6                    | 1                 | 16.77                              |
| 42 plants.....                      | 1913  | 467                  | 60.5                              | 8                                                          | 44                       | 44                   | 4    | (1)     | .269                            | 21                                                  | 45                   | 24                   | 8                    | 1                 | 16.21                              |
|                                     | 1914  | 427                  | 60.6                              | 7                                                          | 42                       | 43                   | 6    | (1)     | .264                            | 21                                                  | 49                   | 24                   | 4                    | 2                 | 15.89                              |
| 54 plants.....                      | 1914  | 582                  | 60.9                              | 6                                                          | 37                       | 52                   | 5    | (1)     | .265                            | 18                                                  | 55                   | 20                   | 5                    | 2                 | 16.09                              |
|                                     | 1915  | 570                  | 60.3                              | 11                                                         | 32                       | 50                   | 5    | 1       | .272                            | 16                                                  | 54                   | 22                   | 6                    | 2                 | 16.37                              |
| Hook-ups:<br>12 plants.....         | 1907  | 92                   | 63.9                              | 10                                                         | 12                       | 52                   | 26   | ....    | .268                            | 18                                                  | 60                   | 20                   | 2                    | ....              | 17.30                              |
|                                     | 1908  | 84                   | 65.3                              | 4                                                          | 22                       | 42                   | 33   | ....    | .225                            | 39                                                  | 42                   | 19                   | ....                 | ....              | 14.70                              |
|                                     | 1909  | 82                   | 65.7                              | 4                                                          | 15                       | 57                   | 24   | ....    | .241                            | 22                                                  | 61                   | 17                   | ....                 | ....              | 15.82                              |
|                                     | 1910  | 93                   | 65.6                              | ....                                                       | 17                       | 63                   | 19   | ....    | .303                            | 14                                                  | 28                   | 39                   | 17                   | 2                 | 20.06                              |
| 20 plants.....                      | 1910  | 174                  | 63.2                              | 16                                                         | 17                       | 43                   | 25   | ....    | .272                            | 26                                                  | 37                   | 26                   | 9                    | 1                 | 17.13                              |
|                                     | 1911  | 144                  | 63.4                              | 15                                                         | 17                       | 44                   | 25   | ....    | .251                            | 38                                                  | 29                   | 31                   | 1                    | 1                 | 15.81                              |
| 21 plants.....                      | 1911  | 154                  | 63.0                              | 14                                                         | 19                       | 44                   | 23   | ....    | .250                            | 37                                                  | 31                   | 29                   | 1                    | 1                 | 15.66                              |
|                                     | 1912  | 167                  | 62.2                              | 13                                                         | 26                       | 41                   | 21   | ....    | .249                            | 34                                                  | 44                   | 17                   | 5                    | ....              | 15.56                              |
| 22 plants.....                      | 1912  | 177                  | 61.9                              | 12                                                         | 32                       | 36                   | 20   | ....    | .254                            | 32                                                  | 43                   | 20                   | 5                    | ....              | 15.74                              |
|                                     | 1913  | 175                  | 61.4                              | 2                                                          | 42                       | 43                   | 13   | ....    | .300                            | 5                                                   | 41                   | 40                   | 14                   | ....              | 18.27                              |
| 36 plants.....                      | 1913  | 227                  | 59.6                              | ....                                                       | 47                       | 48                   | 5    | ....    | .291                            | 8                                                   | 44                   | 36                   | 12                   | ....              | 17.32                              |
|                                     | 1914  | 220                  | 59.7                              | ....                                                       | 61                       | 33                   | 5    | ....    | .266                            | 15                                                  | 51                   | 32                   | 1                    | ....              | 15.89                              |
| 47 plants.....                      | 1914  | 262                  | 59.8                              | ....                                                       | 48                       | 52                   | .... | ....    | .268                            | 14                                                  | 55                   | 31                   | 1                    | ....              | 16.03                              |
|                                     | 1915  | 245                  | 60.3                              | ....                                                       | 41                       | 59                   | .... | ....    | .270                            | 11                                                  | 54                   | 28                   | 6                    | (1)               | 16.25                              |
| Roll hands, other:<br>9 plants..... | 1907  | 97                   | 66.8                              | 6                                                          | 8                        | 40                   | 45   | ....    | .278                            | 37                                                  | 21                   | 33                   | 4                    | 5                 | 18.53                              |
|                                     | 1908  | 94                   | 67.0                              | 6                                                          | 9                        | 40                   | 45   | ....    | .255                            | 36                                                  | 39                   | 12                   | 9                    | 4                 | 16.97                              |
|                                     | 1909  | 94                   | 66.8                              | 6                                                          | 9                        | 70                   | 15   | ....    | .266                            | 37                                                  | 37                   | 15                   | 5                    | 5                 | 17.65                              |
|                                     | 1910  | 95                   | 66.7                              | 6                                                          | 9                        | 71                   | 15   | ....    | .315                            | 21                                                  | 25                   | 36                   | 7                    | 11                | 21.06                              |
| 18 plants.....                      | 1910  | 180                  | 62.8                              | 22                                                         | 14                       | 44                   | 20   | ....    | .295                            | 28                                                  | 26                   | 28                   | 12                   | 6                 | 18.35                              |
|                                     | 1911  | 177                  | 62.5                              | 22                                                         | 15                       | 42                   | 20   | ....    | .273                            | 29                                                  | 41                   | 19                   | 9                    | 3                 | 16.97                              |
|                                     | 1912  | 176                  | 62.7                              | 21                                                         | 15                       | 44                   | 21   | ....    | .287                            | 24                                                  | 41                   | 23                   | 6                    | 5                 | 17.97                              |
| 18 plants.....                      | 1912  | 170                  | 62.2                              | 21                                                         | 17                       | 43                   | 19   | ....    | .284                            | 24                                                  | 43                   | 24                   | 4                    | 5                 | 17.56                              |
|                                     | 1913  | 168                  | 61.8                              | 4                                                          | 38                       | 48                   | 11   | ....    | .320                            | 20                                                  | 21                   | 41                   | 9                    | 10                | 19.71                              |
| 24 plants.....                      | 1913  | 199                  | 63.2                              | ....                                                       | 24                       | 76                   | .... | ....    | .316                            | 21                                                  | 25                   | 38                   | 7                    | 9                 | 20.02                              |
|                                     | 1914  | 198                  | 63.6                              | ....                                                       | 24                       | 76                   | .... | ....    | .280                            | 27                                                  | 42                   | 23                   | 1                    | 6                 | 17.82                              |
| 37 plants.....                      | 1914  | 240                  | 63.2                              | ....                                                       | 21                       | 79                   | .... | ....    | .285                            | 25                                                  | 41                   | 25                   | 3                    | 6                 | 17.92                              |
|                                     | 1915  | 235                  | 62.6                              | ....                                                       | 26                       | 74                   | .... | ....    | .291                            | 26                                                  | 33                   | 28                   | 8                    | 6                 | 18.23                              |
| Shearmen:<br>15 plants.....         | 1907  | 94                   | 64.8                              | ....                                                       | 31                       | 51                   | 18   | ....    | .249                            | 41                                                  | 34                   | 21                   | ....                 | 4                 | 16.20                              |
|                                     | 1908  | 92                   | 65.1                              | ....                                                       | 34                       | 46                   | 21   | ....    | .216                            | 52                                                  | 40                   | 7                    | ....                 | 1                 | 14.10                              |
|                                     | 1909  | 93                   | 65.3                              | ....                                                       | 33                       | 59                   | 3    | 4       | .225                            | 50                                                  | 39                   | 10                   | 1                    | 1                 | 14.72                              |
|                                     | 1910  | 97                   | 65.0                              | ....                                                       | 32                       | 62                   | 6    | ....    | .247                            | 42                                                  | 33                   | 21                   | 3                    | 1                 | 16.11                              |
| 25 plants.....                      | 1910  | 156                  | 63.3                              | 10                                                         | 30                       | 46                   | 10   | 4       | .264                            | 36                                                  | 36                   | 20                   | 6                    | 3                 | 16.40                              |
|                                     | 1911  | 151                  | 62.5                              | 10                                                         | 34                       | 45                   | 11   | ....    | .254                            | 45                                                  | 32                   | 13                   | 7                    | 3                 | 15.55                              |
|                                     | 1912  | 154                  | 62.4                              | 10                                                         | 36                       | 41                   | 12   | 1       | .254                            | 40                                                  | 36                   | 16                   | 4                    | 3                 | 15.59                              |

<sup>1</sup> Less than one-half of 1 per cent.

TABLE 34.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1907 TO 1915—BAR MILLS—Continued.

| Occupation, and number of plants.   | Year.                        | Number of employees.     | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                          |                      |                            |                                  | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                            | Average full-time weekly earnings. |
|-------------------------------------|------------------------------|--------------------------|-----------------------------------|------------------------------------------------------------|--------------------------|----------------------|----------------------------|----------------------------------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|----------------------------|------------------------------------|
|                                     |                              |                          |                                   | 48 and under.                                              | Over 48 and including 60 | Over 60 and under 72 | 72                         | Over 72                          |                                 | Under 20 cts.                                       | 20 and under 30 cts. | 30 and under 40 cts. | 40 and under 50 cts. | 50 cts. and over.          |                                    |
|                                     |                              |                          |                                   |                                                            |                          |                      |                            |                                  |                                 |                                                     |                      |                      |                      |                            |                                    |
| Shearmen—Concld.<br>24 plants ..... | 1912<br>1913                 | 156<br>159               | 62.4<br>62.0                      | 10<br>.....                                                | 35<br>44                 | 43<br>52             | 12<br>3                    | 1<br>1                           | \$0.251<br>.287                 | 40<br>15                                            | 38<br>55             | 15<br>13             | 4<br>12              | 3<br>5                     | \$15.40<br>17.54                   |
| 41 plants .....                     | 1913<br>1914                 | 218<br>205               | 60.2<br>60.3                      | 5<br>5                                                     | 51<br>49                 | 41<br>41             | 2<br>4                     | 1<br>.....                       | .281<br>.270                    | 21<br>21                                            | 48<br>47             | 14<br>19             | 12<br>8              | 5<br>4                     | 16.74<br>16.08                     |
| 54 plants .....                     | 1914<br>1915                 | 263<br>264               | 60.5<br>60.5                      | 4<br>11                                                    | 47<br>38                 | 46<br>47             | 3<br>5                     | .....<br>.....                   | .280<br>.293                    | 19<br>18                                            | 51<br>48             | 17<br>19             | 8<br>7               | 6<br>8                     | 16.78<br>17.56                     |
| Stranders:<br>13 plants .....       | 1907<br>1908<br>1909<br>1910 | 175<br>174<br>174<br>180 | 59.5<br>59.7<br>59.7<br>59.7      | 22<br>22<br>22<br>22                                       | 29<br>29<br>29<br>30     | 34<br>32<br>42<br>42 | 15<br>17<br>7<br>7         | .....<br>.....<br>.....<br>..... | .334<br>.277<br>.297<br>.344    | 7<br>12<br>5<br>8                                   | 37<br>48<br>52<br>36 | 34<br>40<br>36<br>36 | 8<br>7<br>9<br>..... | 14<br>.....<br>.....<br>12 | 19.45<br>16.25<br>17.34<br>20.06   |
| 21 plants .....                     | 1910<br>1911                 | 272<br>234               | 60.6<br>59.9                      | 18<br>19                                                   | 30<br>32                 | 40<br>35             | 13<br>13                   | .....<br>.....                   | .301<br>.268                    | 14<br>26                                            | 47<br>44             | 26<br>20             | 6<br>11              | 8<br>.....                 | 17.85<br>15.83                     |
| 22 plants .....                     | 1911<br>1912                 | 262<br>266               | 59.8<br>59.6                      | 18<br>18                                                   | 34<br>37                 | 34<br>33             | 13<br>13                   | .....<br>.....                   | .272<br>.283                    | 25<br>23                                            | 42<br>45             | 20<br>18             | 13<br>6              | 8<br>.....                 | 16.03<br>16.62                     |
| 20 plants .....                     | 1912<br>1913                 | 252<br>246               | 59.2<br>58.7                      | 19<br>16                                                   | 43<br>45                 | 27<br>34             | 11<br>5                    | .....<br>.....                   | .284<br>.328                    | 22<br>9                                             | 46<br>40             | 16<br>27             | 7<br>11              | 9<br>13                    | 16.56<br>19.07                     |
| 42 plants .....                     | 1913<br>1914                 | 491<br>485               | 58.3<br>58.3                      | .....<br>.....                                             | 64<br>70                 | 35<br>29             | 1<br>1                     | .....<br>.....                   | .345<br>.316                    | 7<br>9                                              | 35<br>40             | 30<br>32             | 13<br>11             | 15<br>7                    | 20.15<br>18.39                     |
| 56 plants .....                     | 1914<br>1915                 | 635<br>615               | 58.4<br>58.1                      | .....<br>.....                                             | 69<br>77                 | 31<br>23             | (1)<br>(1)                 | .....<br>.....                   | .318<br>.326                    | 10<br>9                                             | 38<br>32             | 33<br>40             | 12<br>12             | 6<br>7                     | 18.57<br>18.99                     |
| Catchers:<br>11 plants .....        | 1907<br>1908<br>1909<br>1910 | 69<br>70<br>70<br>73     | 62.5<br>62.0<br>61.9<br>62.0      | .....<br>.....<br>.....<br>.....                           | 43<br>46<br>46<br>42     | 36<br>34<br>54<br>58 | 20<br>20<br>.....<br>..... | .....<br>.....<br>.....<br>..... | .442<br>.381<br>.400<br>.452    | 9<br>22<br>13<br>7                                  | 41<br>44<br>53<br>27 | 19<br>16<br>14<br>38 | 26<br>14<br>14<br>22 | 6<br>4<br>6<br>6           | 27.68<br>24.57<br>24.93<br>28.17   |
| 20 plants .....                     | 1910<br>1911<br>1912         | 115<br>111<br>110        | 60.2<br>59.9<br>59.7              | 13<br>14<br>14                                             | 40<br>39<br>39           | 40<br>41<br>40       | 7<br>7<br>7                | .....<br>.....<br>.....          | .419<br>.392<br>.399            | 17<br>18<br>23                                      | 28<br>50<br>34       | 33<br>18<br>29       | 18<br>11<br>6        | 4<br>4<br>9                | 25.45<br>23.70<br>23.92            |
| 20 plants .....                     | 1912<br>1913                 | 108<br>110               | 59.4<br>59.4                      | 14<br>.....                                                | 45<br>58                 | 36<br>40             | 6<br>2                     | .....<br>.....                   | .415<br>.462                    | 16<br>13                                            | 34<br>19             | 35<br>33             | 6<br>26              | 9<br>10                    | 24.81<br>27.67                     |
| 44 plants .....                     | 1913<br>1914                 | 222<br>213               | 58.1<br>58.2                      | 3<br>5                                                     | 63<br>54                 | 33<br>40             | 1<br>1                     | .....<br>.....                   | .445<br>.414                    | 12<br>13                                            | 25<br>40             | 31<br>23             | 25<br>19             | 8<br>6                     | 25.73<br>23.80                     |
| 57 plants .....                     | 1914<br>1915                 | 293<br>296               | 58.6<br>58.8                      | 2<br>2                                                     | 60<br>60                 | 38<br>38             | .....<br>.....             | .....<br>.....                   | .430<br>.432                    | 11<br>11                                            | 35<br>34             | 23<br>30             | 24<br>15             | 7<br>10                    | 25.03<br>25.35                     |
| Roughers:<br>15 plants .....        | 1907<br>1908<br>1909<br>1910 | 252<br>242<br>243<br>257 | 61.5<br>62.5<br>62.4<br>62.3      | 14<br>10<br>10<br>10                                       | 25<br>28<br>28<br>28     | 44<br>40<br>57<br>56 | 18<br>22<br>6<br>6         | .....<br>.....<br>.....<br>..... | .434<br>.343<br>.368<br>.407    | 17<br>34<br>23<br>22                                | 37<br>31<br>46<br>28 | 22<br>31<br>26<br>28 | 15<br>13<br>20<br>20 | 9<br>.....<br>.....<br>2   | 26.28<br>21.35<br>22.72<br>25.21   |
| 25 plants .....                     | 1910<br>1911                 | 425<br>395               | 61.0<br>60.6                      | 17<br>18                                                   | 27<br>27                 | 46<br>46             | 9<br>10                    | .....<br>.....                   | .402<br>.376                    | 21<br>22                                            | 30<br>44             | 30<br>21             | 17<br>12             | 1<br>1                     | 24.51<br>22.65                     |
| 26 plants .....                     | 1911<br>1912                 | 403<br>408               | 60.5<br>60.2                      | 18<br>18                                                   | 27<br>28                 | 46<br>45             | 9<br>9                     | .....<br>.....                   | .377<br>.389                    | 22<br>24                                            | 44<br>30             | 22<br>29             | 12<br>15             | 1<br>3                     | 22.68<br>23.33                     |

1 Less than one-half of 1 per cent.

## 308 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

TABLE 34.—FULL-TIME HOURS PER WEEK, RATE OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1907 TO 1915—BAR MILLS—Concluded.

| Occupation, and number of plants.   | Year.                        | Number of employees.     | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                          |                      |                      |                          |                                | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                                  |  | Average full-time weekly earnings. |
|-------------------------------------|------------------------------|--------------------------|-----------------------------------|------------------------------------------------------------|--------------------------|----------------------|----------------------|--------------------------|--------------------------------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|----------------------------------|--|------------------------------------|
|                                     |                              |                          |                                   | 48 and under.                                              | Over 48 and including 60 | Over 60 and under 72 | 72                   | Over 72                  | Under 30 cts.                  |                                 | 30 and under 40 cts.                                | 40 and under 50 cts. | 50 and under 60 cts. | 60 cts. and over.    |                                  |  |                                    |
|                                     |                              |                          |                                   |                                                            |                          |                      |                      |                          |                                |                                 |                                                     |                      |                      |                      |                                  |  |                                    |
| Roughers—Concl'd.<br>26 plants..... | 1912<br>1913                 | 405<br>407               | 59.9<br>59.8                      | 18<br>6                                                    | 35<br>48                 | 40<br>43             | 8<br>4               | .....<br>.....           | \$0.393<br>.436                | 24<br>13                        | 28<br>24                                            | 28<br>36             | 17<br>22             | 3<br>5               | \$23.42<br>26.00                 |  |                                    |
| 44 plants.....                      | 1913<br>1914                 | 305<br>290               | 58.5<br>58.4                      | 3<br>6                                                     | 64<br>62                 | 34<br>31             | 1<br>1               | .....<br>.....           | .452<br>.423                   | 9<br>11                         | 23<br>35                                            | 36<br>27             | 25<br>22             | 8<br>5               | 26.32<br>24.42                   |  |                                    |
| 57 plants.....                      | 1914<br>1915                 | 385<br>386               | 58.8<br>58.9                      | 2<br>2                                                     | 65<br>62                 | 32<br>36             | .....<br>.....       | .....<br>.....           | .436<br>.438                   | 11<br>9                         | 31<br>34                                            | 27<br>31             | 24<br>16             | 7<br>10              | 25.41<br>25.76                   |  |                                    |
|                                     |                              |                          |                                   |                                                            |                          |                      |                      |                          |                                | Under 40 cts.                   | 40 and under 50 cts.                                | 50 and under 60 cts. | 60 and under 70 cts. | 70 cts. and over.    |                                  |  |                                    |
| Heaters:<br>15 plants.....          | 1907<br>1908<br>1909<br>1910 | 121<br>112<br>112<br>142 | 63.9<br>63.9<br>64.0<br>64.2      | 3<br>3<br>3<br>2                                           | 16<br>20<br>20<br>14     | 70<br>61<br>70<br>73 | 10<br>15<br>5<br>7   | 2<br>2<br>4<br>4         | .508<br>.467<br>.488<br>.502   | 29<br>30<br>19<br>25            | 15<br>30<br>30<br>25                                | 36<br>22<br>36<br>31 | 11<br>10<br>10<br>49 | 10<br>6<br>5<br>11   | 32.35<br>29.66<br>31.06<br>31.87 |  |                                    |
| 25 plants.....                      | 1910<br>1911                 | 217<br>180               | 62.9<br>62.6                      | 8<br>10                                                    | 21<br>19                 | 58<br>59             | 10<br>9              | 3<br>2                   | .507<br>.512                   | 25<br>28                        | 25<br>17                                            | 26<br>30             | 14<br>14             | 9<br>10              | 31.73<br>31.97                   |  |                                    |
| 26 plants.....                      | 1911<br>1912                 | 184<br>199               | 62.7<br>62.4                      | 10<br>9                                                    | 19<br>23                 | 60<br>57             | 9<br>9               | 2<br>2                   | .510<br>.482                   | 28<br>36                        | 19<br>18                                            | 30<br>21             | 14<br>19             | 10<br>7              | 31.87<br>29.84                   |  |                                    |
| 26 plants.....                      | 1912<br>1913                 | 196<br>211               | 61.8<br>61.7                      | 9<br>1                                                     | 31<br>39                 | 50<br>53             | 8<br>4               | 2<br>2                   | .499<br>.560                   | 34<br>14                        | 18<br>23                                            | 21<br>22             | 19<br>24             | 8<br>16              | 30.60<br>34.25                   |  |                                    |
| 44 plants.....                      | 1913<br>1914                 | 295<br>272               | 59.7<br>58.9                      | 10<br>13                                                   | 38<br>38                 | 46<br>42             | 3<br>4               | 3<br>3                   | .590<br>.559                   | 14<br>19                        | 20<br>25                                            | 22<br>21             | 23<br>14             | 21<br>20             | 34.74<br>32.42                   |  |                                    |
| 57 plants.....                      | 1914<br>1915                 | 409<br>392               | 59.9<br>60.1                      | 9<br>9                                                     | 36<br>34                 | 52<br>52             | 2<br>3               | 2<br>2                   | .548<br>.562                   | 21<br>18                        | 27<br>22                                            | 19<br>29             | 14<br>14             | 18<br>17             | 32.49<br>33.50                   |  |                                    |
| Rollers:<br>13 plants.....          | 1907<br>1908<br>1909<br>1910 | 65<br>63<br>63<br>67     | 65.5<br>65.7<br>65.5<br>65.2      | .....<br>.....<br>.....<br>.....                           | 34<br>32<br>32<br>28     | 43<br>44<br>52<br>61 | 19<br>19<br>16<br>10 | 5<br>5<br>.....<br>..... | 1.013<br>.878<br>.917<br>1.010 | .....<br>5<br>2<br>2            | .....<br>2<br>8<br>6                                | 8<br>8<br>8<br>3     | 20<br>22<br>11<br>19 | 72<br>64<br>71<br>70 | 66.88<br>57.88<br>60.40<br>66.23 |  |                                    |
| 22 plants.....                      | 1910<br>1911                 | 124<br>116               | 62.4<br>62.0                      | 12<br>13                                                   | 29<br>29                 | 47<br>42             | 12<br>16             | .....<br>.....           | .928<br>.882                   | 2<br>1                          | 7<br>7                                              | 7<br>10              | 18<br>18             | 67<br>63             | 58.21<br>55.26                   |  |                                    |
| 23 plants.....                      | 1911<br>1912                 | 120<br>124               | 62.0<br>61.7                      | 13<br>12                                                   | 30<br>33                 | 43<br>40             | 15<br>15             | .....<br>.....           | .873<br>.860                   | 1<br>2                          | 9<br>4                                              | 10<br>13             | 18<br>17             | 63<br>65             | 54.65<br>53.63                   |  |                                    |
| 24 plants.....                      | 1912<br>1913                 | 128<br>130               | 61.6<br>61.5                      | 12<br>2                                                    | 35<br>48                 | 38<br>37             | 16<br>13             | .....<br>.....           | .863<br>.989                   | 2<br>2                          | 4<br>2                                              | 13<br>6              | 18<br>9              | 63<br>81             | 53.60<br>60.71                   |  |                                    |
| 42 plants.....                      | 1913<br>1914                 | 173<br>165               | 59.3<br>59.6                      | .....<br>.....                                             | 56<br>44                 | 43<br>55             | 1<br>1               | .....<br>.....           | .985<br>.909                   | 2<br>2                          | 3<br>5                                              | 6<br>6               | 8<br>15              | 81<br>73             | 58.85<br>54.44                   |  |                                    |
| 56 plants.....                      | 1914<br>1915                 | 216<br>215               | 59.6<br>59.4                      | .....<br>.....                                             | 49<br>51                 | 51<br>49             | .....<br>.....       | .....<br>.....           | .936<br>.944                   | 2<br>1                          | 5<br>5                                              | 5<br>6               | 14<br>13             | 74<br>76             | 56.13<br>56.75                   |  |                                    |



Referring to the first occupation of the table, laborers, direct comparison can be made of data for 10 identical plants from 1907 to 1910, 15 for 1910 and 1911, 17 for 1911 and 1912, 21 for 1912 and 1913, 42 for 1913 and 1914, and 54 for 1914 and 1915. In 1915 the 54 plants reporting employed 1,029 laborers whose average full time per week was 62.9 hours, a slight reduction as compared with 1914. One per cent of the 1,029 men worked 48 hours and under per week, 48 per cent over 48 and including 60 hours, 41 per cent over 60 and under 72 hours, 8 per cent 72 hours, and 1 per cent over 72 hours per week. The average rate of wages per hour was 17.3 cents, exactly the same as in 1914. Ten per cent of the 1,029 laborers earned under 14 cents per hour, 17 per cent 14 and under 16 cents, 31 per cent 16 and under 18 cents, 22 per cent 18 and under 20 cents, and 20 per cent 20 and under 25 cents per hour. The average weekly earnings of the 1,029 laborers was \$10.91, or nine cents less than in 1914.

The full-time earnings in 1915 in 15 occupation groups were from \$10.91 to \$18.99 per week, in 3 other groups from \$20.95 to \$25.76 per week, and the full-time earnings of heaters were \$33.50 and of rollers \$56.75 per week.

• EARNINGS OF ROLLING CREWS.

In order to compare the earnings of the various members of the rolling crews in the mills of different sizes, Table 35, showing simply the average earnings per hour in 1915, has been prepared.

Although the exertion increases with the size of the mill, skill and experience are such large factors that the increase in wages in any one of the occupations is by no means proportionate to the increase in the size of the mill and the weight of the product. In the case of rollers, it will be noticed that there is no connection between the size of the mill and the average earnings per hour. Whatever difference does exist is due entirely to the skill and experience of the particular roller and to the custom of the individual establishment in which he is employed.

TABLE 35.—AVERAGE EARNINGS PER HOUR OF MEMBERS OF ROLLING CREWS, 1915—  
BAR MILLS.

| Occupation.           | Size of mills. |         |          |          |                      |          |          | Total, all sizes. |
|-----------------------|----------------|---------|----------|----------|----------------------|----------|----------|-------------------|
|                       | 8-inch.        | 9-inch. | 10-inch. | 12-inch. | 13, 14, and 15 inch. | 16-inch. | 18-inch. |                   |
| Rollers.....          | \$0.987        | \$0.924 | \$0.999  | \$0.933  | \$0.686              | \$0.928  | \$1.013  | \$0.944           |
| Roughers.....         | .425           | .435    | .464     | .408     | .454                 | .430     | .480     | .438              |
| Catchers.....         | .427           | .446    | .465     | .397     | .438                 | .422     | .434     | .432              |
| Stranders.....        | .282           | .270    | .343     | .334     | .365                 | .427     | .469     | .326              |
| Finishers.....        | .319           | .287    | .417     | .347     | .360                 | .360     | .390     | .352              |
| Hook-ups.....         |                |         |          | .293     | .273                 | .251     | .263     | .270              |
| Roll hands, other.... | .260           | .245    | .367     | .287     | .261                 | .246     | .321     | .291              |

## INDEX NUMBERS.

Owing to changes in the number of plants reported from year to year, and the consequent differences in the averages for the overlapping year in two groups of plants, it is difficult to make a comparison of the actual data over a period of several years which will give an accurate measure of the changes throughout the period. To aid in making such a comparison relative or index numbers have been computed from the averages of Table 35 for full-time hours per week, rates of wages per hour, and full-time weekly earnings, for each occupation group from 1907 to 1915, inclusive, and are presented in Table 36.

These relative or index numbers are simply percentages for which the data for 1915 are taken as the base, or 100 per cent. The relative for each year is the per cent that the average for that year is of the average for 1915. For example, the relative full-time weekly earnings of stockers in 1907 were 90 as compared with 100 in 1915; that is, the full-time weekly earnings of stockers in 1907 were 90 per cent of the full-time weekly earnings in this occupation in 1915. The method of computing relative numbers is explained on pages 65 to 67.

Table 36 also shows for each occupation the per cent of increase or decrease in full-time hours per week, rates of wages per hour, and full-time weekly earnings in 1915 as compared with each specified year preceding. Thus, the full-time weekly earnings of stockers in 1915 were 11 per cent higher than in 1907, 18 per cent higher than in 1908 and in 1909, 4 per cent higher than in 1910, 10 per cent higher than in 1911, 3 per cent higher than in 1912, 5 per cent lower than in 1913, and 1 per cent lower than in 1914.

In other columns of the table is shown the per cent of change in each year as compared with the year immediately preceding. Thus, the full-time weekly earnings of stockers were 6 per cent lower in 1908 than in 1907, the same in 1909 as in 1908, 13 per cent higher in 1910 than in 1909, 5 per cent lower in 1911 than in 1910, 7 per cent higher in 1912 than in 1911, and 8 per cent higher in 1913 than in 1912, 4 per cent lower in 1914 than in 1913, and 1 per cent lower in 1915 than in 1914. The other occupations and items of the table can be studied in like manner. The percentages of increase and decrease are computed from the relative numbers.

TABLE 36.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1907 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATIONS—BAR MILLS.

| Occupation and year.         | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|------------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                              | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in— |                                                      |
|                              |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| <b>Stockers:</b>             |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                    | 101                                | —1                                           | —                                                    | 92                               | +9                                           | —                                                    | 90                                  | +11                                          | —                                                    |
| 1908.....                    | 100                                | ( <sup>1</sup> )                             | —1                                                   | 86                               | +16                                          | —7                                                   | 85                                  | +18                                          | —6                                                   |
| 1909.....                    | 100                                | ( <sup>1</sup> )                             | ( <sup>1</sup> )                                     | 87                               | +15                                          | +1                                                   | 85                                  | +18                                          | ( <sup>1</sup> )                                     |
| 1910.....                    | 100                                | ( <sup>1</sup> )                             | ( <sup>1</sup> )                                     | 98                               | +2                                           | +13                                                  | 96                                  | +4                                           | +13                                                  |
| 1911.....                    | 101                                | —1                                           | ( <sup>1</sup> )                                     | 90                               | +11                                          | —8                                                   | 91                                  | +10                                          | —5                                                   |
| 1912.....                    | 101                                | —1                                           | ( <sup>1</sup> )                                     | 96                               | +4                                           | +7                                                   | 97                                  | +3                                           | +7                                                   |
| 1913.....                    | 101                                | —1                                           | ( <sup>1</sup> )                                     | 105                              | —5                                           | +9                                                   | 105                                 | —5                                           | +8                                                   |
| 1914.....                    | 100                                | ( <sup>1</sup> )                             | —1                                                   | 101                              | —1                                           | —4                                                   | 101                                 | —1                                           | —4                                                   |
| 1915.....                    | 100                                | ( <sup>1</sup> )                             | ( <sup>1</sup> )                                     | 100                              | —                                            | —1                                                   | 100                                 | —                                            | —1                                                   |
| <b>Heaters:</b>              |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                    | 102                                | —2                                           | —                                                    | 97                               | +3                                           | —                                                    | 100                                 | ( <sup>1</sup> )                             | —                                                    |
| 1908.....                    | 102                                | —2                                           | ( <sup>1</sup> )                                     | 93                               | +12                                          | —8                                                   | 92                                  | +9                                           | —8                                                   |
| 1909.....                    | 102                                | —2                                           | ( <sup>1</sup> )                                     | 93                               | +8                                           | +4                                                   | 96                                  | +4                                           | +4                                                   |
| 1910.....                    | 102                                | —2                                           | ( <sup>1</sup> )                                     | 96                               | +4                                           | +3                                                   | 98                                  | +2                                           | +2                                                   |
| 1911.....                    | 102                                | —2                                           | ( <sup>1</sup> )                                     | 97                               | +3                                           | +1                                                   | 99                                  | +1                                           | +1                                                   |
| 1912.....                    | 101                                | —1                                           | —1                                                   | 92                               | +9                                           | —5                                                   | 93                                  | +8                                           | —6                                                   |
| 1913.....                    | 101                                | —1                                           | ( <sup>1</sup> )                                     | 103                              | —3                                           | +12                                                  | 104                                 | —4                                           | +12                                                  |
| 1914.....                    | 100                                | ( <sup>1</sup> )                             | —1                                                   | 98                               | +2                                           | —5                                                   | 97                                  | +3                                           | —7                                                   |
| 1915.....                    | 100                                | ( <sup>1</sup> )                             | ( <sup>1</sup> )                                     | 100                              | —                                            | +2                                                   | 100                                 | —                                            | +3                                                   |
| <b>Heaters' helpers:</b>     |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                    | 102                                | —2                                           | —                                                    | 89                               | +12                                          | —                                                    | 91                                  | +10                                          | —                                                    |
| 1908.....                    | 101                                | —1                                           | —1                                                   | 82                               | +22                                          | —8                                                   | 83                                  | +20                                          | —9                                                   |
| 1909.....                    | 101                                | —1                                           | ( <sup>1</sup> )                                     | 85                               | +18                                          | +4                                                   | 85                                  | +18                                          | +2                                                   |
| 1910.....                    | 102                                | —2                                           | +1                                                   | 95                               | +5                                           | +12                                                  | 96                                  | +4                                           | +13                                                  |
| 1911.....                    | 101                                | —1                                           | —1                                                   | 91                               | +10                                          | —4                                                   | 92                                  | +9                                           | —4                                                   |
| 1912.....                    | 101                                | —1                                           | ( <sup>1</sup> )                                     | 91                               | +10                                          | ( <sup>1</sup> )                                     | 92                                  | +9                                           | ( <sup>1</sup> )                                     |
| 1913.....                    | 101                                | —1                                           | ( <sup>1</sup> )                                     | 99                               | +1                                           | +9                                                   | 100                                 | ( <sup>1</sup> )                             | +9                                                   |
| 1914.....                    | 101                                | —1                                           | ( <sup>1</sup> )                                     | 97                               | +3                                           | —2                                                   | 98                                  | +2                                           | —2                                                   |
| 1915.....                    | 100                                | —                                            | —1                                                   | 100                              | —                                            | +3                                                   | 100                                 | —                                            | +2                                                   |
| <b>Chargers and helpers:</b> |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                    | 101                                | —1                                           | —                                                    | 86                               | +16                                          | —                                                    | 87                                  | +15                                          | —                                                    |
| 1908.....                    | 101                                | —1                                           | ( <sup>1</sup> )                                     | 80                               | +25                                          | —7                                                   | 81                                  | +23                                          | —7                                                   |
| 1909.....                    | 101                                | —1                                           | ( <sup>1</sup> )                                     | 80                               | +25                                          | ( <sup>1</sup> )                                     | 81                                  | +23                                          | ( <sup>1</sup> )                                     |
| 1910.....                    | 102                                | —2                                           | +1                                                   | 90                               | +11                                          | +13                                                  | 91                                  | +10                                          | +12                                                  |
| 1911.....                    | 101                                | —1                                           | —1                                                   | 86                               | +16                                          | —4                                                   | 88                                  | +14                                          | —3                                                   |
| 1912.....                    | 102                                | —2                                           | +1                                                   | 90                               | +11                                          | +5                                                   | 92                                  | +9                                           | +5                                                   |
| 1913.....                    | 101                                | —1                                           | —1                                                   | 101                              | —1                                           | +12                                                  | 102                                 | —2                                           | +11                                                  |
| 1914.....                    | 100                                | ( <sup>1</sup> )                             | —1                                                   | 99                               | +1                                           | —2                                                   | 99                                  | +1                                           | —3                                                   |
| 1915.....                    | 100                                | —                                            | ( <sup>1</sup> )                                     | 100                              | —                                            | +1                                                   | 100                                 | —                                            | +1                                                   |
| <b>Drag-downs:</b>           |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                    | 102                                | —2                                           | —                                                    | 92                               | +9                                           | —                                                    | 94                                  | +6                                           | —                                                    |
| 1908.....                    | 101                                | —1                                           | —1                                                   | 84                               | +19                                          | —9                                                   | 85                                  | +18                                          | —10                                                  |
| 1909.....                    | 102                                | —2                                           | +1                                                   | 85                               | +18                                          | +1                                                   | 87                                  | +15                                          | +2                                                   |
| 1910.....                    | 102                                | —2                                           | ( <sup>1</sup> )                                     | 98                               | +2                                           | +15                                                  | 99                                  | +1                                           | +14                                                  |
| 1911.....                    | 101                                | —1                                           | —1                                                   | 95                               | +5                                           | —3                                                   | 96                                  | +4                                           | —3                                                   |
| 1912.....                    | 101                                | —1                                           | ( <sup>1</sup> )                                     | 92                               | +9                                           | —3                                                   | 92                                  | +9                                           | —4                                                   |
| 1913.....                    | 100                                | ( <sup>1</sup> )                             | —1                                                   | 103                              | —3                                           | +12                                                  | 102                                 | —2                                           | +11                                                  |
| 1914.....                    | 99                                 | +1                                           | —1                                                   | 99                               | +1                                           | —4                                                   | 98                                  | +2                                           | —4                                                   |
| 1915.....                    | 100                                | —                                            | +1                                                   | 100                              | —                                            | +1                                                   | 100                                 | —                                            | +2                                                   |
| <b>Roll engineers:</b>       |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                    | 104                                | —4                                           | —                                                    | 90                               | +11                                          | —                                                    | 94                                  | +6                                           | —                                                    |
| 1908.....                    | 103                                | —3                                           | —1                                                   | 88                               | +14                                          | —2                                                   | 91                                  | +10                                          | —3                                                   |
| 1909.....                    | 103                                | —3                                           | ( <sup>1</sup> )                                     | 86                               | +16                                          | —2                                                   | 89                                  | +12                                          | —2                                                   |
| 1910.....                    | 103                                | —3                                           | ( <sup>1</sup> )                                     | 92                               | +9                                           | +7                                                   | 95                                  | +5                                           | +2                                                   |
| 1911.....                    | 101                                | —1                                           | —2                                                   | 91                               | +10                                          | —                                                    | 93                                  | +8                                           | —                                                    |
| 1912.....                    | 100                                | ( <sup>1</sup> )                             | —1                                                   | 92                               | +9                                           | +1                                                   | 93                                  | +8                                           | ( <sup>1</sup> )                                     |
| 1913.....                    | 101                                | —1                                           | +1                                                   | 100                              | ( <sup>1</sup> )                             | +9                                                   | 101                                 | —1                                           | +9                                                   |
| 1914.....                    | 100                                | ( <sup>1</sup> )                             | —1                                                   | 100                              | ( <sup>1</sup> )                             | ( <sup>1</sup> )                                     | 101                                 | —1                                           | ( <sup>1</sup> )                                     |
| 1915.....                    | 100                                | —                                            | ( <sup>1</sup> )                                     | 100                              | —                                            | ( <sup>1</sup> )                                     | 100                                 | —                                            | —1                                                   |

<sup>1</sup> No change.

TABLE 36.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1907 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATIONS—BAR MILLS—Continued.

| Occupation and year. | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|----------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                      | Relative full-time hours per week. | Per cent of increase (+) or decrease (-) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (-) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (-) in— |                                                      |
|                      |                                    | 1915 as compared with each specified year.   | Each specified year as compared with preceding year. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with preceding year. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with preceding year. |
| <b>Rollers:</b>      |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....            | 102                                | -2                                           |                                                      | 101                              | -1                                           |                                                      | 102                                 | -2                                           |                                                      |
| 1908.....            | 102                                | -2                                           | (1)                                                  | 87                               | +15                                          | -14                                                  | 89                                  | +12                                          | -13                                                  |
| 1909.....            | 102                                | -2                                           | (1)                                                  | 91                               | +10                                          | +5                                                   | 92                                  | +9                                           | +3                                                   |
| 1910.....            | 101                                | -1                                           | -1                                                   | 100                              | (1)                                          | +10                                                  | 101                                 | -1                                           | +10                                                  |
| 1911.....            | 101                                | -1                                           | (1)                                                  | 95                               | +5                                           | -5                                                   | 96                                  | +4                                           | -5                                                   |
| 1912.....            | 100                                | (1)                                          | -1                                                   | 94                               | +6                                           | -1                                                   | 94                                  | +6                                           | -2                                                   |
| 1913.....            | 100                                | (1)                                          | (1)                                                  | 108                              | -7                                           | +15                                                  | 107                                 | -7                                           | +14                                                  |
| 1914.....            | 100                                | (1)                                          | (1)                                                  | 99                               | +1                                           | -8                                                   | 99                                  | +1                                           | -7                                                   |
| 1915.....            | 100                                |                                              | (1)                                                  | 100                              |                                              | +1                                                   | 100                                 |                                              | +1                                                   |
| <b>Roughers:</b>     |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....            | 100                                | (1)                                          |                                                      | 106                              | -6                                           |                                                      | 105                                 | -5                                           |                                                      |
| 1908.....            | 102                                | -2                                           | +2                                                   | 84                               | +19                                          | -21                                                  | 85                                  | +18                                          | -19                                                  |
| 1909.....            | 102                                | -2                                           | (1)                                                  | 90                               | +11                                          | +7                                                   | 91                                  | +10                                          | +7                                                   |
| 1910.....            | 101                                | -1                                           | -1                                                   | 99                               | +1                                           | +10                                                  | 101                                 | -1                                           | +11                                                  |
| 1911.....            | 101                                | -1                                           | (1)                                                  | 93                               | +8                                           | -6                                                   | 93                                  | +8                                           | -8                                                   |
| 1912.....            | 100                                | (1)                                          | -1                                                   | 96                               | +4                                           | +3                                                   | 96                                  | +4                                           | +3                                                   |
| 1913.....            | 100                                | (1)                                          | (1)                                                  | 106                              | -6                                           | +10                                                  | 106                                 | -6                                           | +10                                                  |
| 1914.....            | 100                                | (1)                                          | (1)                                                  | 100                              | (1)                                          | -6                                                   | 99                                  | +1                                           | -7                                                   |
| 1915.....            | 100                                |                                              | (1)                                                  | 100                              |                                              | (1)                                                  | 100                                 |                                              | +1                                                   |
| <b>Catchers:</b>     |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....            | 101                                | -1                                           |                                                      | 99                               | +1                                           |                                                      | 100                                 | (1)                                          |                                                      |
| 1908.....            | 100                                | (1)                                          | -1                                                   | 85                               | +18                                          | -14                                                  | 85                                  | +18                                          | -15                                                  |
| 1909.....            | 100                                | (1)                                          | (1)                                                  | 89                               | +12                                          | +5                                                   | 90                                  | +11                                          | +6                                                   |
| 1910.....            | 100                                | (1)                                          | (1)                                                  | 101                              | -1                                           | +13                                                  | 102                                 | -2                                           | +13                                                  |
| 1911.....            | 100                                | (1)                                          | (1)                                                  | 94                               | +6                                           | -7                                                   | 95                                  | +5                                           | -7                                                   |
| 1912.....            | 100                                | (1)                                          | (1)                                                  | 96                               | +4                                           | +2                                                   | 96                                  | +4                                           | +1                                                   |
| 1913.....            | 100                                | (1)                                          | (1)                                                  | 107                              | -7                                           | +11                                                  | 107                                 | -7                                           | +11                                                  |
| 1914.....            | 100                                | (1)                                          | (1)                                                  | 100                              | (1)                                          | -7                                                   | 99                                  | +1                                           | -7                                                   |
| 1915.....            | 100                                |                                              | (1)                                                  | 100                              |                                              | (1)                                                  | 100                                 |                                              | +1                                                   |
| <b>Stranders:</b>    |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....            | 103                                | -3                                           |                                                      | 97                               | +3                                           |                                                      | 98                                  | +2                                           |                                                      |
| 1908.....            | 103                                | -3                                           | (1)                                                  | 80                               | +25                                          | -8                                                   | 82                                  | +22                                          | -16                                                  |
| 1909.....            | 103                                | -3                                           | (1)                                                  | 86                               | +16                                          | +8                                                   | 87                                  | +15                                          | +6                                                   |
| 1910.....            | 103                                | -3                                           | (1)                                                  | 100                              | (1)                                          | +16                                                  | 101                                 | -1                                           | +16                                                  |
| 1911.....            | 102                                | -2                                           | -1                                                   | 89                               | +12                                          | -11                                                  | 90                                  | +11                                          | -11                                                  |
| 1912.....            | 101                                | -1                                           | -1                                                   | 92                               | +9                                           | +3                                                   | 93                                  | +8                                           | +3                                                   |
| 1913.....            | 101                                | -1                                           | (1)                                                  | 107                              | -7                                           | +16                                                  | 107                                 | -7                                           | +15                                                  |
| 1914.....            | 101                                | -1                                           | (1)                                                  | 98                               | +2                                           | -8                                                   | 98                                  | +2                                           | -8                                                   |
| 1915.....            | 100                                |                                              | -1                                                   | 100                              |                                              | +2                                                   | 100                                 |                                              | +2                                                   |
| <b>Finishers:</b>    |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....            | 101                                | -1                                           |                                                      | 89                               | +12                                          |                                                      | 91                                  | +10                                          |                                                      |
| 1908.....            | 102                                | -2                                           | +1                                                   | 81                               | +23                                          | -9                                                   | 82                                  | +22                                          | -10                                                  |
| 1909.....            | 102                                | -2                                           | (1)                                                  | 87                               | +15                                          | +7                                                   | 88                                  | +14                                          | +7                                                   |
| 1910.....            | 101                                | -1                                           | -1                                                   | 95                               | +5                                           | +9                                                   | 97                                  | +3                                           | +10                                                  |
| 1911.....            | 100                                | (1)                                          | -1                                                   | 91                               | +10                                          | -4                                                   | 92                                  | +9                                           | -5                                                   |
| 1912.....            | 100                                | (1)                                          | (1)                                                  | 93                               | +8                                           | +2                                                   | 94                                  | +6                                           | +2                                                   |
| 1913.....            | 100                                | (1)                                          | (1)                                                  | 103                              | -3                                           | +11                                                  | 103                                 | -3                                           | +10                                                  |
| 1914.....            | 100                                | (1)                                          | (1)                                                  | 97                               | +3                                           | -6                                                   | 98                                  | +2                                           | -5                                                   |
| 1915.....            | 100                                |                                              | (1)                                                  | 100                              |                                              | +3                                                   | 100                                 |                                              | +2                                                   |
| <b>Hook-ups:</b>     |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....            | 98                                 | +2                                           |                                                      | 89                               | +12                                          |                                                      | 87                                  | +15                                          |                                                      |
| 1908.....            | 100                                | (1)                                          | +2                                                   | 74                               | +35                                          | -17                                                  | 74                                  | +35                                          | -15                                                  |
| 1909.....            | 101                                | -1                                           | +1                                                   | 80                               | +25                                          | +8                                                   | 80                                  | +25                                          | +8                                                   |
| 1910.....            | 101                                | -1                                           | (1)                                                  | 100                              | (1)                                          | +25                                                  | 101                                 | -1                                           | +26                                                  |
| 1911.....            | 101                                | -1                                           | (1)                                                  | 92                               | +9                                           | -8                                                   | 93                                  | +8                                           | -8                                                   |
| 1912.....            | 100                                | (1)                                          | -1                                                   | 92                               | +9                                           | (1)                                                  | 93                                  | +8                                           | (1)                                                  |
| 1913.....            | 99                                 | +1                                           | -1                                                   | 109                              | -8                                           | +18                                                  | 108                                 | -7                                           | +16                                                  |
| 1914.....            | 99                                 | +1                                           | (1)                                                  | 99                               | +1                                           | -9                                                   | 99                                  | +1                                           | -8                                                   |
| 1915.....            | 100                                |                                              | +1                                                   | 100                              |                                              | +1                                                   | 100                                 |                                              | +1                                                   |

1 No change.

TABLE 36.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1907 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATIONS—BAR MILLS—Continued.

| Occupation and year.       | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|----------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                            | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in— |                                                      |
|                            |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| <b>Roll hands, other:</b>  |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                  | 101                                | -1                                           | .....                                                | 89                               | +12                                          | .....                                                | 88                                  | +14                                          | .....                                                |
| 1908.....                  | 102                                | -2                                           | +1                                                   | 82                               | +22                                          | - 8                                                  | 81                                  | +23                                          | - 8                                                  |
| 1909.....                  | 101                                | -1                                           | -1                                                   | 85                               | +18                                          | + 4                                                  | 84                                  | +19                                          | + 4                                                  |
| 1910.....                  | 101                                | -1                                           | ( )                                                  | 101                              | - 1                                          | +19                                                  | 101                                 | - 1                                          | +20                                                  |
| 1911.....                  | 101                                | -1                                           | ( )                                                  | 93                               | + 8                                          | - 8                                                  | 93                                  | + 8                                          | - 8                                                  |
| 1912.....                  | 101                                | -1                                           | ( )                                                  | 98                               | + 2                                          | + 5                                                  | 98                                  | + 2                                          | + 5                                                  |
| 1913.....                  | 100                                | ( <sup>1</sup> )                             | -1                                                   | 111                              | -10                                          | +13                                                  | 110                                 | - 9                                          | +12                                                  |
| 1914.....                  | 101                                | -1                                           | +1                                                   | 98                               | + 2                                          | -12                                                  | 98                                  | + 2                                          | -11                                                  |
| 1915.....                  | 100                                | .....                                        | -1                                                   | 100                              | .....                                        | + 2                                                  | 100                                 | .....                                        | + 2                                                  |
| <b>Hotbed men:</b>         |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                  | 103                                | -3                                           | .....                                                | 84                               | +19                                          | .....                                                | 87                                  | +15                                          | .....                                                |
| 1908.....                  | 103                                | -3                                           | ( )                                                  | 77                               | +30                                          | - 8                                                  | 79                                  | +27                                          | - 9                                                  |
| 1909.....                  | 103                                | -3                                           | ( )                                                  | 80                               | +25                                          | + 4                                                  | 80                                  | +25                                          | + 4                                                  |
| 1910.....                  | 103                                | -3                                           | ( )                                                  | 92                               | + 9                                          | +15                                                  | 94                                  | + 6                                          | +18                                                  |
| 1911.....                  | 101                                | -1                                           | -2                                                   | 87                               | +15                                          | - 5                                                  | 89                                  | +12                                          | - 5                                                  |
| 1912.....                  | 101                                | -1                                           | ( )                                                  | 89                               | +12                                          | + 2                                                  | 90                                  | +11                                          | + 1                                                  |
| 1913.....                  | 100                                | ( <sup>1</sup> )                             | -1                                                   | 102                              | - 2                                          | +15                                                  | 103                                 | - 3                                          | +14                                                  |
| 1914.....                  | 101                                | -1                                           | +1                                                   | 99                               | + 1                                          | - 3                                                  | 100                                 | ( <sup>1</sup> )                             | - 3                                                  |
| 1915.....                  | 100                                | .....                                        | -1                                                   | 100                              | .....                                        | + 1                                                  | 100                                 | .....                                        | ( <sup>1</sup> )                                     |
| <b>Shearmen:</b>           |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                  | 102                                | -2                                           | .....                                                | 91                               | +10                                          | .....                                                | 93                                  | + 8                                          | .....                                                |
| 1908.....                  | 102                                | -2                                           | ( )                                                  | 79                               | +27                                          | -13                                                  | 80                                  | +25                                          | -14                                                  |
| 1909.....                  | 102                                | -2                                           | ( )                                                  | 82                               | +22                                          | + 4                                                  | 84                                  | +19                                          | + 5                                                  |
| 1910.....                  | 102                                | -2                                           | ( )                                                  | 91                               | +10                                          | +11                                                  | 92                                  | + 9                                          | +10                                                  |
| 1911.....                  | 101                                | -1                                           | -1                                                   | 87                               | +15                                          | - 4                                                  | 87                                  | +15                                          | - 5                                                  |
| 1912.....                  | 100                                | ( <sup>1</sup> )                             | -1                                                   | 87                               | +15                                          | ( )                                                  | 87                                  | +15                                          | ( <sup>1</sup> )                                     |
| 1913.....                  | 100                                | ( <sup>1</sup> )                             | ( )                                                  | 100                              | ( <sup>1</sup> )                             | +15                                                  | 100                                 | ( <sup>1</sup> )                             | +15                                                  |
| 1914.....                  | 100                                | ( <sup>1</sup> )                             | ( )                                                  | 96                               | + 4                                          | - 4                                                  | 96                                  | + 4                                          | - 4                                                  |
| 1915.....                  | 100                                | .....                                        | ( )                                                  | 100                              | .....                                        | + 4                                                  | 100                                 | .....                                        | + 4                                                  |
| <b>Shearmen's helpers:</b> |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                  | 104                                | -4                                           | .....                                                | 86                               | +16                                          | .....                                                | 88                                  | +14                                          | .....                                                |
| 1908.....                  | 104                                | -4                                           | ( )                                                  | 83                               | +20                                          | - 3                                                  | 85                                  | +18                                          | - 3                                                  |
| 1909.....                  | 106                                | -6                                           | +2                                                   | 83                               | +20                                          | ( )                                                  | 87                                  | +15                                          | + 2                                                  |
| 1910.....                  | 103                                | -3                                           | -3                                                   | 91                               | +10                                          | +10                                                  | 92                                  | + 9                                          | + 6                                                  |
| 1911.....                  | 101                                | -1                                           | -2                                                   | 86                               | +16                                          | - 5                                                  | 86                                  | +16                                          | - 7                                                  |
| 1912.....                  | 101                                | -1                                           | ( )                                                  | 89                               | +12                                          | + 3                                                  | 90                                  | +11                                          | + 5                                                  |
| 1913.....                  | 100                                | ( <sup>1</sup> )                             | -1                                                   | 105                              | - 5                                          | +18                                                  | 104                                 | - 4                                          | +16                                                  |
| 1914.....                  | 101                                | -1                                           | +1                                                   | 99                               | + 1                                          | - 6                                                  | 99                                  | + 1                                          | - 5                                                  |
| 1915.....                  | 100                                | .....                                        | -1                                                   | 100                              | .....                                        | + 1                                                  | 100                                 | .....                                        | + 1                                                  |
| <b>Bundlers:</b>           |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                  | 99                                 | +1                                           | .....                                                | 93                               | + 8                                          | .....                                                | 92                                  | + 9                                          | .....                                                |
| 1908.....                  | 99                                 | +1                                           | ( )                                                  | 80                               | +25                                          | -14                                                  | 79                                  | +27                                          | -14                                                  |
| 1909.....                  | 99                                 | +1                                           | ( )                                                  | 85                               | +18                                          | + 6                                                  | 84                                  | +19                                          | + 6                                                  |
| 1910.....                  | 99                                 | +1                                           | ( )                                                  | 98                               | + 2                                          | +15                                                  | 97                                  | + 3                                          | +15                                                  |
| 1911.....                  | 95                                 | +5                                           | -4                                                   | 91                               | +10                                          | - 7                                                  | 87                                  | +15                                          | -10                                                  |
| 1912.....                  | 95                                 | +5                                           | ( )                                                  | 89                               | +12                                          | - 2                                                  | 85                                  | +18                                          | - 2                                                  |
| 1913.....                  | 95                                 | +5                                           | ( )                                                  | 105                              | - 5                                          | +18                                                  | 100                                 | ( <sup>1</sup> )                             | +18                                                  |
| 1914.....                  | 99                                 | +1                                           | +4                                                   | 98                               | + 2                                          | - 7                                                  | 97                                  | + 3                                          | - 3                                                  |
| 1915.....                  | 100                                | .....                                        | +1                                                   | 100                              | .....                                        | + 2                                                  | 100                                 | .....                                        | + 3                                                  |
| <b>Laborers:</b>           |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                  | 104                                | -4                                           | .....                                                | 86                               | +16                                          | .....                                                | 88                                  | +14                                          | .....                                                |
| 1908.....                  | 98                                 | +2                                           | -6                                                   | 86                               | +16                                          | ( )                                                  | 84                                  | +19                                          | - 5                                                  |
| 1909.....                  | 103                                | -3                                           | +5                                                   | 84                               | +19                                          | - 2                                                  | 86                                  | +16                                          | + 2                                                  |
| 1910.....                  | 102                                | -2                                           | -1                                                   | 90                               | +11                                          | + 7                                                  | 91                                  | +10                                          | + 6                                                  |
| 1911.....                  | 99                                 | +1                                           | -3                                                   | 90                               | +11                                          | ( )                                                  | 89                                  | +12                                          | - 2                                                  |
| 1912.....                  | 100                                | ( <sup>1</sup> )                             | +1                                                   | 90                               | +11                                          | ( )                                                  | 90                                  | +11                                          | + 1                                                  |
| 1913.....                  | 99                                 | +1                                           | -1                                                   | 101                              | - 1                                          | +12                                                  | 100                                 | ( <sup>1</sup> )                             | +11                                                  |
| 1914.....                  | 101                                | -1                                           | +2                                                   | 100                              | ( <sup>1</sup> )                             | - 1                                                  | 101                                 | - 1                                          | + 1                                                  |
| 1915.....                  | 100                                | .....                                        | -1                                                   | 100                              | .....                                        | ( )                                                  | 100                                 | .....                                        | - 1                                                  |

<sup>1</sup> No change.

TABLE 36.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1907 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATIONS—BAR MILLS—Concluded.

| Occupation and year.        | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|-----------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                             | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in— |                                                      |
|                             |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| Unclassified—productive:    |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1914.....                   | 101                                | —1                                           | .....                                                | 98                               | + 2                                          | .....                                                | 97                                  | + 3                                          | .....                                                |
| 1915.....                   | 100                                | .....                                        | —1                                                   | 100                              | .....                                        | + 2                                                  | 100                                 | .....                                        | + 3                                                  |
| Unclassified—nonproductive: |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1914.....                   | 103                                | —3                                           | .....                                                | 99                               | + 1                                          | .....                                                | 101                                 | — 1                                          | .....                                                |
| 1915.....                   | 100                                | .....                                        | —3                                                   | 100                              | .....                                        | + 1                                                  | 100                                 | .....                                        | — 1                                                  |
| All occupations:            |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1907.....                   | 102                                | —2                                           | .....                                                | 95                               | + 5                                          | .....                                                | 96                                  | + 4                                          | .....                                                |
| 1908.....                   | 101                                | —1                                           | —1                                                   | 86                               | +16                                          | — 9                                                  | 86                                  | +16                                          | —10                                                  |
| 1909.....                   | 102                                | —2                                           | +1                                                   | 87                               | +15                                          | + 1                                                  | 88                                  | +14                                          | + 2                                                  |
| 1910.....                   | 102                                | —2                                           | ( <sup>1</sup> )                                     | 97                               | + 3                                          | +11                                                  | 97                                  | + 3                                          | +10                                                  |
| 1911.....                   | 101                                | —1                                           | —1                                                   | 93                               | + 8                                          | — 4                                                  | 93                                  | + 8                                          | — 4                                                  |
| 1912.....                   | 100                                | ( <sup>1</sup> )                             | —1                                                   | 94                               | + 6                                          | + 1                                                  | 94                                  | + 6                                          | + 1                                                  |
| 1913.....                   | 100                                | ( <sup>1</sup> )                             | ( <sup>1</sup> )                                     | 104                              | — 4                                          | +11                                                  | 104                                 | — 4                                          | +11                                                  |
| 1914.....                   | 101                                | —1                                           | +1                                                   | 99                               | + 1                                          | — 5                                                  | 99                                  | + 1                                          | — 5                                                  |
| 1915.....                   | 100                                | .....                                        | —1                                                   | 100                              | .....                                        | + 1                                                  | 100                                 | .....                                        | + 1                                                  |

<sup>1</sup> No change.

The relative full-time weekly earnings for all occupations combined in 1907 was 96 as compared with 100 in 1915. In other words, the full-time weekly earnings in 1907 were 96 per cent of the full-time weekly earnings in 1915. The relative was considerably lower in 1908 and in 1909, increased in 1910 to 97, was lower in 1911 and in 1912, increased to 104 in 1913, and again was lower in 1914 and in 1915. These repeated three-year periods already have been referred to on page 302. They are further shown by the two columns of per cents of increase or decrease in weekly earnings. Referring to the last column it is seen that the relative for 1908 was 10 per cent less than that for 1907, while for 1910 it was 10 per cent higher than for 1909. Again, the relative for 1911 was 4 per cent less than that for 1910, while for 1913 it was 11 per cent higher than for 1912, and for 1914 5 per cent less than for 1913. These relative numbers for all occupations combined for each year previous to 1914 are based on the principal productive occupations only, but for 1914 and 1915 include also the unclassified groups tabulated for 1914 and 1915 for the first time.

## FULL-TIME WORKING DAYS PER WEEK.

The number and per cent of employees in the principal productive occupations in bar-mill plants whose customary working time per week was 5 days or turns, or 6 days, or 7 days, or variations thereof, are shown in Table. 37. The figures are presented for each of the three districts for which bar mills are reported, and for the three combined. The employees given under the heading "5 days, 5 days, and 6 days in rotation" and "5 days, 6 days, and 6 days in rotation" are engaged in occupations for which the plant employs three shifts instead of the customary two to complete the 24 hours of the day. All three of the crews in such cases work from Monday to Friday inclusive, while only one crew or two crews, as the case may be, work a Saturday turn.

Two sets of figures are shown for the plants reported for 1914 and 1915, the first covering only the principal productive occupations as shown for all the preceding groups of years and therefore strictly comparable with them, and the second including the unclassified occupations (see pp. 55 and 56) tabulated for 1914 and 1915 for the first time.

TABLE 37.—NUMBER AND PER CENT OF EMPLOYEES IN EACH DISTRICT WORKING EACH SPECIFIED NUMBER OF DAYS PER WEEK, BY YEARS, 1907 TO 1915—*BAR MILLS*.

[The figures for each group of years are for identical plants.]

| District, and number of plants. | Year. | Number of employees. | Employees whose customary working time per week was— |                                |                                         |                                         |         |                                |                                |                                         |                                         |
|---------------------------------|-------|----------------------|------------------------------------------------------|--------------------------------|-----------------------------------------|-----------------------------------------|---------|--------------------------------|--------------------------------|-----------------------------------------|-----------------------------------------|
|                                 |       |                      | 5 days.                                              | 5 days and 6 days alternately. | 5 days, 5 days, and 6 days in rotation. | 5 days, 6 days, and 6 days in rotation. | 6 days. | 5 days and 7 days alternately. | 6 days and 7 days alternately. | 6 days, 6 days, and 7 days in rotation. | 6 days, 7 days, and 7 days in rotation. |
| Eastern:                        |       |                      |                                                      |                                |                                         |                                         |         |                                |                                |                                         |                                         |
| 3 plants.....                   | 1907  | 313                  | 1                                                    | 242                            |                                         |                                         | 70      |                                |                                |                                         |                                         |
|                                 | 1908  | 355                  | 1                                                    | 290                            |                                         |                                         | 64      |                                |                                |                                         |                                         |
|                                 | 1909  | 357                  | 1                                                    | 290                            |                                         |                                         | 66      |                                |                                |                                         |                                         |
|                                 | 1910  | 380                  | 11                                                   | 266                            |                                         |                                         | 103     |                                |                                |                                         |                                         |
| 8 plants.....                   | 1910  | 890                  | 157                                                  | 323                            |                                         |                                         | 406     |                                |                                |                                         | 4                                       |
|                                 | 1911  | 794                  | 1                                                    | 453                            |                                         |                                         | 340     |                                |                                |                                         |                                         |
| 8 plants.....                   | 1911  | 831                  | 1                                                    | 455                            |                                         |                                         | 375     |                                |                                |                                         |                                         |
|                                 | 1912  | 887                  | 14                                                   | 551                            |                                         |                                         | 322     |                                |                                |                                         |                                         |
| 8 plants.....                   | 1912  | 946                  | 14                                                   | 588                            |                                         |                                         | 344     |                                |                                |                                         |                                         |
|                                 | 1913  | 1,083                | 46                                                   | 684                            |                                         |                                         | 353     |                                |                                |                                         |                                         |
| 12 plants.....                  | 1913  | 1,387                | 57                                                   | 912                            |                                         | 3                                       | 410     |                                | 2                              | 3                                       |                                         |
|                                 | 1914  | 1,232                | 62                                                   | 790                            |                                         | 3                                       | 372     |                                | 2                              | 3                                       |                                         |
| 15 plants.....                  | 1914  | 1,562                | 64                                                   | 1,144                          |                                         | 3                                       | 349     |                                |                                |                                         | 2                                       |
|                                 | 1915  | 1,543                | 63                                                   | 1,130                          |                                         |                                         | 348     |                                |                                |                                         | 2                                       |
| 15 plants.....                  | 1914  | 1,851                | 69                                                   | 1,207                          |                                         | 3                                       | 554     |                                | 11                             |                                         | 7                                       |
|                                 | 1915  | 1,876                | 70                                                   | 1,211                          |                                         |                                         | 573     |                                | 12                             |                                         | 10                                      |
| Pittsburgh:                     |       |                      |                                                      |                                |                                         |                                         |         |                                |                                |                                         |                                         |
| 6 plants.....                   | 1907  | 1,215                | 32                                                   | 561                            | 42                                      |                                         | 521     | 8                              | 34                             |                                         | 17                                      |
|                                 | 1908  | 1,060                | 58                                                   | 455                            | 42                                      |                                         | 479     | 4                              | 16                             |                                         | 6                                       |
|                                 | 1909  | 1,163                | 26                                                   | 465                            | 42                                      |                                         | 579     | 4                              | 18                             |                                         | 29                                      |
|                                 | 1910  | 1,311                | 17                                                   | 675                            | 45                                      |                                         | 552     | 4                              | 14                             |                                         | 4                                       |

# 316 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

TABLE 37.—NUMBER AND PER CENT OF EMPLOYEES IN EACH DISTRICT WORKING EACH SPECIFIED NUMBER OF DAYS PER WEEK, BY YEARS, 1907 TO 1915—*BAR MILLS*—Continued.

NUMBER—Continued.

| District, and number of plants. | Year. | Number of employees. | Employees whose customary working time per week was— |                                |                                         |                                         |         |                                |                                |                                         |                                         |
|---------------------------------|-------|----------------------|------------------------------------------------------|--------------------------------|-----------------------------------------|-----------------------------------------|---------|--------------------------------|--------------------------------|-----------------------------------------|-----------------------------------------|
|                                 |       |                      | 5 days.                                              | 5 days and 6 days alternately. | 5 days, 5 days, and 6 days in rotation. | 5 days, 6 days, and 6 days in rotation. | 6 days. | 5 days and 7 days alternately. | 6 days and 7 days alternately. | 6 days, 6 days, and 7 days in rotation. | 6 days, 7 days, and 7 days in rotation. |
| Pittsburgh—Concluded.           | 1910  | 2,185                | 18                                                   | 676                            | 45                                      | .....                                   | 1,403   | 4                              | 14                             | .....                                   | 25                                      |
|                                 |       | 1,999                | 33                                                   | 730                            | 42                                      | .....                                   | 1,167   | 4                              | 23                             | .....                                   | ..                                      |
|                                 | 1911  | 2,096                | 33                                                   | 806                            | 42                                      | .....                                   | 1,188   | 4                              | 16                             | .....                                   | 7                                       |
|                                 |       | 2,157                | 37                                                   | 886                            | 42                                      | .....                                   | 1,167   | 4                              | 12                             | .....                                   | 9                                       |
|                                 | 1912  | 2,193                | 37                                                   | 967                            | 42                                      | .....                                   | 1,120   | 4                              | 14                             | .....                                   | 9                                       |
|                                 |       | 2,309                | 121                                                  | 1,146                          | 42                                      | .....                                   | 590     | .....                          | 53                             | 342                                     | 6                                       |
|                                 | 1913  | 2,380                | 115                                                  | 1,154                          | 42                                      | .....                                   | 700     | .....                          | 54                             | 297                                     | 9                                       |
|                                 |       | 2,295                | 198                                                  | 1,018                          | 42                                      | .....                                   | 678     | .....                          | 38                             | 280                                     | 9                                       |
|                                 | 1914  | 2,833                | 100                                                  | 1,388                          | 42                                      | .....                                   | 890     | .....                          | 38                             | 349                                     | 12                                      |
|                                 |       | 2,845                | 88                                                   | 1,439                          | 42                                      | .....                                   | 1,242   | .....                          | 18                             | 12                                      | 4                                       |
|                                 | 1915  | 3,250                | 162                                                  | 1,461                          | 42                                      | .....                                   | 1,128   | 4                              | 64                             | 349                                     | 12                                      |
|                                 |       | 3,366                | 122                                                  | 1,549                          | 42                                      | .....                                   | 1,562   | 4                              | 56                             | 12                                      | .....                                   |
| Great Lakes and Middle West:    | 1907  | 850                  | 10                                                   | 421                            | .....                                   | 64                                      | 336     | 6                              | 4                              | .....                                   | 9                                       |
|                                 |       | 801                  | 12                                                   | 335                            | .....                                   | 48                                      | 385     | 6                              | 6                              | .....                                   | 9                                       |
|                                 |       | 795                  | 4                                                    | 316                            | .....                                   | 48                                      | 356     | 6                              | 24                             | .....                                   | 11                                      |
|                                 |       | 869                  | .....                                                | 223                            | .....                                   | 49                                      | 571     | 6                              | 8                              | .....                                   | 12                                      |
|                                 | 1910  | 1,017                | .....                                                | 227                            | .....                                   | 49                                      | 651     | 6                              | 8                              | .....                                   | 76                                      |
|                                 |       | 914                  | 4                                                    | 347                            | .....                                   | 45                                      | 469     | 6                              | 10                             | .....                                   | 6                                       |
|                                 | 1911  | 937                  | 4                                                    | 429                            | .....                                   | 45                                      | 497     | 6                              | 10                             | .....                                   | 6                                       |
|                                 |       | 1,006                | 4                                                    | 421                            | .....                                   | 45                                      | 502     | 6                              | 22                             | .....                                   | 6                                       |
|                                 | 1912  | 975                  | 4                                                    | 420                            | .....                                   | 10 53                                   | 454     | 6                              | 22                             | 10                                      | .....                                   |
|                                 |       | 928                  | 5                                                    | 358                            | .....                                   | 49                                      | 469     | 6                              | 16                             | 10                                      | .....                                   |
|                                 | 1913  | 1,279                | 11                                                   | 457                            | 90                                      | 49                                      | 621     | 6                              | 14                             | 11 10                                   | .....                                   |
|                                 |       | 1,220                | 45                                                   | 411                            | 111                                     | 49                                      | 570     | 6                              | 3                              | 11 10                                   | .....                                   |
|                                 | 1914  | 2,207                | 63                                                   | 1,189                          | 111                                     | 49                                      | 755     | 6                              | 7                              | 11 10                                   | .....                                   |
|                                 |       | 2,113                | 62                                                   | 1,152                          | 67                                      | 49                                      | 762     | 6                              | 7                              | .....                                   | 17                                      |
|                                 | 1915  | 2,694                | 77                                                   | 1,284                          | 120                                     | 49                                      | 1,085   | 6                              | 15                             | 11 10                                   | .....                                   |
|                                 |       | 2,481                | 76                                                   | 1,216                          | 70                                      | 49                                      | 989     | 6                              | 15                             | 11 10                                   | .....                                   |
| Southern:                       | 1913  | 795                  | 207                                                  | 252                            | .....                                   | 335                                     | .....   | .....                          | .....                          | .....                                   | 1                                       |
|                                 |       | 714                  | 155                                                  | 195                            | .....                                   | 363                                     | .....   | .....                          | .....                          | .....                                   | 1                                       |
|                                 | 1914  | 721                  | 156                                                  | 195                            | .....                                   | 369                                     | .....   | .....                          | .....                          | .....                                   | 1                                       |
|                                 |       | 719                  | 172                                                  | 146                            | .....                                   | 400                                     | .....   | .....                          | .....                          | .....                                   | 1                                       |
|                                 | 1915  | 1,007                | 215                                                  | 219                            | .....                                   | 558                                     | .....   | .....                          | .....                          | .....                                   | 15                                      |
|                                 |       | 1,006                | 229                                                  | 172                            | .....                                   | 591                                     | .....   | .....                          | .....                          | .....                                   | 14                                      |

<sup>1</sup> Including 4 employees who worked 6 days during 5 months of the year.

<sup>2</sup> Including 62 employees who worked 6 days during 5 months of the year.

<sup>3</sup> Including 16 employees who worked 5 days during 4 months of the year; 112 employees who worked 5 and 6 days alternately during 4 months of the year; and 4 employees who worked 7 days every eighth week.

<sup>4</sup> Including 9 employees who worked 6 days for 5 weeks and 7 days for 4 weeks in each 9-week period.

<sup>5</sup> Including 64 employees who worked 6 days during 5 months of the year.

<sup>6</sup> Including 15 employees who worked 5 days during 4 months of the year; 112 employees who worked 5 and 6 days alternately during 4 months of the year; and 6 employees who worked 7 days every eighth week.

<sup>7</sup> Including 18 employees who worked 6 days for 5 weeks and 7 days for 4 weeks in each 9-week period.

<sup>8</sup> Including 15 employees who worked 5 days during 4 months of the year; 114 employees who worked 5 and 6 days alternately during 4 months of the year; 18 employees who worked 7 days every ninth week; 6 employees who worked 7 days every sixth week; and 3 employees who worked 7 days every eighth week.

<sup>9</sup> Including 10 employees who worked 7 days every fifth week.

<sup>10</sup> Including 8 employees who worked 5 days every fourth week.

<sup>11</sup> Worked 7 days every fifth week.



TABLE 37.—NUMBER AND PER CENT OF EMPLOYEES IN EACH DISTRICT WORKING EACH SPECIFIED NUMBER OF DAYS PER WEEK, BY YEARS, 1907 TO 1915—*BAR MILLS*—Continued.

NUMBER—Concluded.

| District, and number of plants. | Year. | Number of employees. | Employees whose customary working time per week was— |                                |                                         |                                         |                      |                                |                                |                                         |                                         |
|---------------------------------|-------|----------------------|------------------------------------------------------|--------------------------------|-----------------------------------------|-----------------------------------------|----------------------|--------------------------------|--------------------------------|-----------------------------------------|-----------------------------------------|
|                                 |       |                      | 5 days.                                              | 5 days and 6 days alternately. | 5 days, 5 days, and 6 days in rotation. | 5 days, 6 days, and 6 days in rotation. | 6 days.              | 5 days and 7 days alternately. | 6 days and 7 days alternately. | 6 days, 6 days, and 7 days in rotation. | 6 days, 7 days, and 7 days in rotation. |
| Total:                          |       |                      |                                                      |                                |                                         |                                         |                      |                                |                                |                                         |                                         |
| 15 plants.....                  | 1907  | 2,378                | 43                                                   | 1,224                          | 42                                      | 64                                      | 927                  | 14                             | 38                             | .....                                   | 26                                      |
|                                 | 1908  | 2,216                | 71                                                   | 1,080                          | 42                                      | 48                                      | 928                  | 10                             | 22                             | .....                                   | 15                                      |
|                                 | 1909  | 2,315                | 31                                                   | 1,101                          | 42                                      | 48                                      | 1,001                | 10                             | 42                             | .....                                   | 40                                      |
|                                 | 1910  | 2,560                | 28                                                   | 1,164                          | 45                                      | 49                                      | 1,226                | 10                             | 22                             | .....                                   | 16                                      |
| 25 plants.....                  | 1910  | 4,092                | 175                                                  | 1,226                          | 45                                      | 49                                      | 2,460                | 10                             | 22                             | .....                                   | 105                                     |
|                                 | 1911  | 3,707                | 38                                                   | 1,530                          | 42                                      | 45                                      | 1,003                | 10                             | 33                             | .....                                   | 6                                       |
| 26 plants.....                  | 1911  | 3,924                | 38                                                   | 1,690                          | 42                                      | 45                                      | 1,060                | 10                             | 26                             | .....                                   | 13                                      |
|                                 | 1912  | 4,050                | 55                                                   | 1,858                          | 42                                      | 45                                      | 1,991                | 10                             | 34                             | .....                                   | 15                                      |
| 26 plants.....                  | 1912  | 4,114                | 55                                                   | 1,975                          | 42                                      | <sup>2</sup> 53                         | 1,918                | 10                             | 36                             | 10                                      | 15                                      |
|                                 | 1913  | 4,320                | 172                                                  | 2,188                          | 42                                      | 49                                      | 1,412                | 6                              | 69                             | 352                                     | 24                                      |
| 44 plants.....                  | 1913  | 5,841                | <sup>3</sup> 390                                     | 42,775                         | 132                                     | 52                                      | <sup>62</sup> 2,066  | 6                              | <sup>6</sup> 70                | <sup>1</sup> 310                        | 9                                       |
|                                 | 1914  | 5,461                | <sup>3</sup> 360                                     | 72,414                         | 153                                     | 52                                      | <sup>82</sup> 2,103  | 6                              | <sup>9</sup> 43                | <sup>1</sup> 293                        | 9                                       |
| 57 plants.....                  | 1914  | 7,323                | 383                                                  | 3,916                          | 153                                     | 52                                      | 2,363                | 6                              | 45                             | <sup>1</sup> 359                        | 12                                      |
|                                 | 1915  | 7,220                | 385                                                  | 3,867                          | 109                                     | 49                                      | 2,752                | 6                              | 25                             | <sup>1</sup> 12                         | 15                                      |
| 57 plants.....                  | 1914  | 8,802                | <sup>3</sup> 523                                     | 74,171                         | 162                                     | 52                                      | <sup>83</sup> 3,325  | 10                             | <sup>9</sup> 90                | <sup>1</sup> 359                        | 12                                      |
|                                 | 1915  | 8,732                | <sup>3</sup> 497                                     | 74,178                         | 112                                     | 53                                      | <sup>103</sup> 3,715 | 10                             | 83                             | <sup>1</sup> 22                         | 62                                      |

## PER CENT.

|                |      |       |                   |    |       |                   |       |       |                   |                   |                   |
|----------------|------|-------|-------------------|----|-------|-------------------|-------|-------|-------------------|-------------------|-------------------|
| Eastern:       |      |       |                   |    |       |                   |       |       |                   |                   |                   |
| 3 plants.....  | 1907 | 313   | ( <sup>11</sup> ) | 77 | ..... | 22                | ..... | ..... | .....             | .....             | .....             |
|                | 1908 | 355   | ( <sup>11</sup> ) | 82 | ..... | 18                | ..... | ..... | .....             | .....             | .....             |
|                | 1909 | 357   | ( <sup>11</sup> ) | 81 | ..... | 19                | ..... | ..... | .....             | .....             | .....             |
|                | 1910 | 380   | 3                 | 70 | ..... | 27                | ..... | ..... | .....             | .....             | .....             |
| 8 plants.....  | 1910 | 890   | 18                | 36 | ..... | 46                | ..... | ..... | .....             | .....             | ( <sup>11</sup> ) |
|                | 1911 | 794   | ( <sup>11</sup> ) | 57 | ..... | 43                | ..... | ..... | .....             | .....             | .....             |
| 8 plants.....  | 1911 | 831   | ( <sup>11</sup> ) | 55 | ..... | 45                | ..... | ..... | .....             | .....             | .....             |
|                | 1912 | 887   | 2                 | 62 | ..... | 36                | ..... | ..... | .....             | .....             | .....             |
| 8 plants.....  | 1912 | 946   | 2                 | 62 | ..... | 36                | ..... | ..... | .....             | .....             | .....             |
|                | 1913 | 1,083 | 4                 | 63 | ..... | 33                | ..... | ..... | .....             | .....             | .....             |
| 12 plants..... | 1913 | 1,387 | 4                 | 66 | ..... | ( <sup>11</sup> ) | 30    | ..... | ( <sup>11</sup> ) | ( <sup>11</sup> ) | .....             |
|                | 1914 | 1,232 | 5                 | 64 | ..... | ( <sup>11</sup> ) | 30    | ..... | ( <sup>11</sup> ) | ( <sup>11</sup> ) | .....             |
| 15 plants..... | 1914 | 1,562 | 4                 | 73 | ..... | ( <sup>11</sup> ) | 22    | ..... | .....             | .....             | ( <sup>11</sup> ) |
|                | 1915 | 1,543 | 4                 | 73 | ..... | 23                | ..... | ..... | .....             | .....             | ( <sup>11</sup> ) |
| 15 plants..... | 1914 | 1,851 | 4                 | 65 | ..... | ( <sup>11</sup> ) | 30    | ..... | 1                 | .....             | ( <sup>11</sup> ) |
|                | 1915 | 1,876 | 4                 | 65 | ..... | 31                | ..... | 1     | .....             | .....             | .....             |

<sup>1</sup> Including 10 employees who worked 7 days every fifth week.<sup>2</sup> Including 8 employees who worked 5 days every fourth week.<sup>3</sup> Including 4 employees who worked 6 days during 5 months of the year.<sup>4</sup> Including 62 employees who worked 6 days during 5 months of the year.<sup>5</sup> Including 16 employees who worked 5 days during 4 months of the year; 112 employees who worked 5 and 6 days alternately during 4 months of the year; and 4 employees who worked 7 days every eighth week.<sup>6</sup> Including 9 employees who worked 6 days for 5 weeks and 7 days for 4 weeks in each 9-week period.<sup>7</sup> Including 64 employees who worked 6 days during 5 months of the year.<sup>8</sup> Including 15 employees who worked 5 days during 4 months of the year; 112 employees who worked 5 and 6 days alternately during 4 months of the year; and 6 employees who worked 7 days every eighth week.<sup>9</sup> Including 18 employees who worked 6 days for 5 weeks and 7 days for 4 weeks in each 9-week period.<sup>10</sup> Including 15 employees who worked 5 days during 4 months of the year; 114 employees who worked 5 and 6 days alternately during 4 months of the year; 6 employees who worked 7 days every sixth week; 3 employees who worked 7 days every eighth week; and 18 employees who worked 7 days every ninth week.<sup>11</sup> Less than one-half of 1 per cent.

TABLE 37.—NUMBER AND PER CENT OF EMPLOYEES IN EACH DISTRICT WORKING EACH SPECIFIED NUMBER OF DAYS PER WEEK, BY YEARS, 1907 TO 1915—*BAR MILLS*—Continued.

PER CENT—Continued.

| District, and number of plants.               | Year. | Number of employees. | Employees whose customary working time per week was— |                                |                                         |                                         |         |                                |                                |                                         |                                         |         |
|-----------------------------------------------|-------|----------------------|------------------------------------------------------|--------------------------------|-----------------------------------------|-----------------------------------------|---------|--------------------------------|--------------------------------|-----------------------------------------|-----------------------------------------|---------|
|                                               |       |                      | 5 days.                                              | 5 days and 6 days alternately. | 5 days, 5 days, and 6 days in rotation. | 5 days, 6 days, and 6 days in rotation. | 6 days. | 5 days and 7 days alternately. | 6 days and 7 days alternately. | 6 days, 6 days, and 7 days in rotation. | 6 days, 7 days, and 7 days in rotation. | 7 days. |
| Pittsburgh:<br>6 plants.....                  | 1907  | 1,215                | 3                                                    | 46                             | 4                                       | .....                                   | 43      | 1                              | 3                              | .....                                   | .....                                   | 1       |
|                                               | 1908  | 1,060                | 6                                                    | 43                             | 4                                       | .....                                   | 45      | (1)                            | 2                              | .....                                   | .....                                   | 1       |
|                                               | 1909  | 1,163                | 2                                                    | 40                             | 4                                       | .....                                   | 50      | (1)                            | 2                              | .....                                   | .....                                   | 3       |
|                                               | 1910  | 1,311                | 1                                                    | 52                             | 3                                       | .....                                   | 42      | (1)                            | 1                              | .....                                   | .....                                   | (1)     |
| 10 plants.....                                | 1910  | 2,185                | 1                                                    | 31                             | 2                                       | .....                                   | 64      | (1)                            | 1                              | .....                                   | .....                                   | 1       |
|                                               | 1911  | 1,999                | 2                                                    | 37                             | 2                                       | .....                                   | 58      | (1)                            | 1                              | .....                                   | .....                                   | .....   |
| 10 plants.....                                | 1911  | 2,096                | 2                                                    | 39                             | 2                                       | .....                                   | 57      | (1)                            | 1                              | .....                                   | .....                                   | (1)     |
|                                               | 1912  | 2,157                | 2                                                    | 41                             | 2                                       | .....                                   | 54      | (1)                            | 1                              | .....                                   | .....                                   | (1)     |
| 10 plants.....                                | 1912  | 2,193                | 2                                                    | 44                             | 2                                       | .....                                   | 51      | (1)                            | 1                              | .....                                   | .....                                   | (1)     |
|                                               | 1913  | 2,309                | 5                                                    | 50                             | 2                                       | .....                                   | 26      | .....                          | 2                              | 15                                      | (1)                                     | (1)     |
| 11 plants.....                                | 1913  | 2,380                | 5                                                    | 48                             | 2                                       | .....                                   | 29      | .....                          | 2                              | 12                                      | (1)                                     | (1)     |
|                                               | 1914  | 2,295                | 4                                                    | 44                             | 2                                       | .....                                   | 35      | .....                          | 2                              | 12                                      | (1)                                     | 1       |
| 14 plants.....                                | 1914  | 2,833                | 4                                                    | 49                             | 1                                       | .....                                   | 31      | .....                          | 1                              | 12                                      | (1)                                     | (1)     |
|                                               | 1915  | 2,845                | 3                                                    | 51                             | 1                                       | .....                                   | 44      | .....                          | 1                              | (1)                                     | .....                                   | (1)     |
| 14 plants.....                                | 1914  | 3,250                | 5                                                    | 45                             | 1                                       | .....                                   | 35      | (1)                            | 2                              | 11                                      | (1)                                     | 1       |
|                                               | 1915  | 3,366                | 4                                                    | 46                             | 1                                       | (1)                                     | 46      | (1)                            | 2                              | (1)                                     | .....                                   | (1)     |
| Great Lakes and Middle West:<br>6 plants..... | 1907  | 850                  | 1                                                    | 50                             | .....                                   | 8                                       | 40      | 1                              | 1                              | .....                                   | .....                                   | 1       |
|                                               | 1908  | 801                  | 2                                                    | 42                             | .....                                   | 6                                       | 48      | 1                              | 1                              | .....                                   | .....                                   | 1       |
|                                               | 1909  | 795                  | 1                                                    | 44                             | .....                                   | 6                                       | 45      | 1                              | 3                              | .....                                   | .....                                   | 1       |
|                                               | 1910  | 869                  | .....                                                | 26                             | .....                                   | 6                                       | 66      | 1                              | 1                              | .....                                   | .....                                   | 1       |
| 7 plants.....                                 | 1910  | 1,017                | .....                                                | 22                             | .....                                   | 5                                       | 64      | 1                              | 1                              | .....                                   | .....                                   | 8       |
|                                               | 1911  | 914                  | (1)                                                  | 38                             | .....                                   | 5                                       | 54      | 1                              | 1                              | .....                                   | .....                                   | 1       |
| 8 plants.....                                 | 1911  | 997                  | 1                                                    | 43                             | .....                                   | 5                                       | 50      | 1                              | 1                              | .....                                   | .....                                   | 1       |
|                                               | 1912  | 1,006                | 1                                                    | 42                             | .....                                   | 5                                       | 50      | 1                              | 2                              | .....                                   | .....                                   | 1       |
| 8 plants.....                                 | 1912  | 975                  | (1)                                                  | 43                             | .....                                   | 5                                       | 47      | 1                              | 2                              | 1                                       | .....                                   | 1       |
|                                               | 1913  | 928                  | 1                                                    | 39                             | .....                                   | 5                                       | 51      | 1                              | 2                              | 1                                       | .....                                   | 2       |
| 12 plants.....                                | 1913  | 1,279                | 1                                                    | 36                             | 7                                       | 4                                       | 49      | (1)                            | 1                              | 1                                       | .....                                   | 2       |
|                                               | 1914  | 1,220                | 4                                                    | 34                             | 9                                       | 4                                       | 47      | (1)                            | (1)                            | 1                                       | .....                                   | 1       |
| 19 plants.....                                | 1914  | 2,207                | 3                                                    | 54                             | 5                                       | 3                                       | 34      | (1)                            | .....                          | (1)                                     | .....                                   | 1       |
|                                               | 1915  | 2,113                | 3                                                    | 55                             | 3                                       | 2                                       | 36      | (1)                            | (1)                            | .....                                   | .....                                   | (1)     |
| 19 plants.....                                | 1914  | 2,694                | 3                                                    | 48                             | 4                                       | 2                                       | 40      | (1)                            | 1                              | (1)                                     | .....                                   | 2       |
|                                               | 1915  | 2,484                | 3                                                    | 50                             | 3                                       | 2                                       | 40      | (1)                            | 1                              | (1)                                     | .....                                   | 1       |
| Southern:<br>9 plants.....                    | 1913  | 795                  | 26                                                   | 32                             | .....                                   | .....                                   | 42      | .....                          | .....                          | .....                                   | .....                                   | (1)     |
|                                               | 1914  | 714                  | 22                                                   | 27                             | .....                                   | .....                                   | 51      | .....                          | .....                          | .....                                   | .....                                   | (1)     |
| 9 plants.....                                 | 1914  | 721                  | 22                                                   | 27                             | .....                                   | .....                                   | 51      | .....                          | .....                          | .....                                   | .....                                   | (1)     |
|                                               | 1915  | 719                  | 24                                                   | 20                             | .....                                   | .....                                   | 56      | .....                          | .....                          | .....                                   | .....                                   | (1)     |
| 9 plants.....                                 | 1914  | 1,007                | 21                                                   | 22                             | .....                                   | .....                                   | 55      | .....                          | .....                          | .....                                   | .....                                   | 1       |
|                                               | 1915  | 1,006                | 23                                                   | 17                             | .....                                   | .....                                   | 59      | .....                          | .....                          | .....                                   | .....                                   | 1       |
| Total:<br>15 plants.....                      | 1907  | 2,378                | 2                                                    | 52                             | 2                                       | 3                                       | 39      | 1                              | 2                              | .....                                   | .....                                   | 1       |
|                                               | 1908  | 2,216                | 3                                                    | 49                             | 2                                       | 2                                       | 42      | 1                              | 1                              | .....                                   | .....                                   | 1       |
|                                               | 1909  | 2,315                | 1                                                    | 48                             | 2                                       | 2                                       | 43      | (1)                            | 2                              | .....                                   | .....                                   | 2       |
|                                               | 1910  | 2,560                | 1                                                    | 46                             | 2                                       | 2                                       | 48      | (1)                            | 1                              | .....                                   | .....                                   | 1       |
| 25 plants.....                                | 1910  | 4,092                | 4                                                    | 30                             | 1                                       | 1                                       | 60      | (1)                            | 1                              | .....                                   | .....                                   | 3       |
|                                               | 1911  | 3,707                | 1                                                    | 41                             | 1                                       | 1                                       | 54      | (1)                            | 1                              | .....                                   | .....                                   | (1)     |

1 Less than one-half of 1 per cent.

TABLE 37.—NUMBER AND PER CENT OF EMPLOYEES IN EACH DISTRICT WORKING EACH SPECIFIED NUMBER OF DAYS PER WEEK, BY YEARS, 1907 TO 1915—*BAR MILLS*—Concluded.

PER CENT—Concluded.

| District, and number of<br>plants. | Year. | Number<br>of<br>em-<br>ploy-<br>ees. | Employees whose customary working time per week was— |                                                      |                                                                   |                                                                   |            |                                                      |                                                      |                                                                   |                                                                   |            |
|------------------------------------|-------|--------------------------------------|------------------------------------------------------|------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------------|------------|------------------------------------------------------|------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------------|------------|
|                                    |       |                                      | 5<br>days.                                           | 5<br>days<br>and 6<br>days<br>alter-<br>nate-<br>ly. | 5<br>days,<br>5<br>days,<br>and 6<br>days<br>in<br>rota-<br>tion. | 5<br>days,<br>6<br>days,<br>and 6<br>days<br>in<br>rota-<br>tion. | 6<br>days. | 5<br>days<br>and 7<br>days<br>alter-<br>nate-<br>ly. | 6<br>days<br>and 7<br>days<br>alter-<br>nate-<br>ly. | 6<br>days,<br>6<br>days,<br>and 7<br>days<br>in<br>rota-<br>tion. | 6<br>days,<br>7<br>days,<br>and 7<br>days<br>in<br>rota-<br>tion. | 7<br>days. |
| Total—Concluded.                   |       |                                      |                                                      |                                                      |                                                                   |                                                                   |            |                                                      |                                                      |                                                                   |                                                                   |            |
| 26 plants.....                     | 1911  | 3,924                                | 1                                                    | 43                                                   | 1                                                                 | 1                                                                 | 53         | (1)                                                  | 1                                                    | .....                                                             | .....                                                             | (1)        |
|                                    | 1912  | 4,050                                | 1                                                    | 46                                                   | 1                                                                 | 1                                                                 | 49         | (1)                                                  | 1                                                    | .....                                                             | .....                                                             | (1)        |
| 26 plants.....                     | 1912  | 4,114                                | 1                                                    | 48                                                   | 1                                                                 | 1                                                                 | 47         | (1)                                                  | .....                                                | (1)                                                               | .....                                                             | (1)        |
|                                    | 1913  | 4,320                                | 4                                                    | 51                                                   | 1                                                                 | 1                                                                 | 33         | (1)                                                  | 2                                                    | 8                                                                 | (1)                                                               | 1          |
| 44 plants.....                     | 1913  | 5,841                                | 7                                                    | 48                                                   | 2                                                                 | 1                                                                 | 35         | (1)                                                  | 1                                                    | 5                                                                 | (1)                                                               | 1          |
|                                    | 1914  | 5,461                                | 7                                                    | 44                                                   | 3                                                                 | 1                                                                 | 39         | (1)                                                  | 1                                                    | 5                                                                 | (1)                                                               | 1          |
| 57 plants.....                     | 1914  | 7,323                                | 5                                                    | 53                                                   | 2                                                                 | 1                                                                 | 32         | (1)                                                  | 1                                                    | 5                                                                 | (1)                                                               | (1)        |
|                                    | 1915  | 7,220                                | 5                                                    | 54                                                   | 2                                                                 | 1                                                                 | 38         | (1)                                                  | (1)                                                  | (1)                                                               | .....                                                             | (1)        |
| 57 plants.....                     | 1914  | 8,802                                | 6                                                    | 47                                                   | 2                                                                 | 1                                                                 | 38         | (1)                                                  | 1                                                    | 4                                                                 | (1)                                                               | 1          |
|                                    | 1915  | 8,732                                | 6                                                    | 48                                                   | 1                                                                 | 1                                                                 | 43         | (1)                                                  | 1                                                    | (1)                                                               | .....                                                             | 1          |

<sup>1</sup> Less than one-half of 1 per cent.

Two general tables are presented for this department, as follows:

Table O.—Full-time hours per week, rates of wages per hour, and full-time weekly earnings, in the United States, by years, 1907 to 1915.

Table P.—Full-time hours per week, rates of wages per hour, and full-time weekly earnings, in each district, by years, 1913 to 1915.

The data from Table O are summarized in Table 34, percentages being used instead of the actual figures for classified hours and rates of wages.

The order in which the occupations are given in Tables O and P and the table of relative numbers follows that of the processes of manufacture. "Identical plants" as used in the tables of this report are identical units of identical establishments reporting the same occupations in each of two or more consecutive years. For a more extended explanation see page 58.

Figures for each geographical division for each preceding year back to 1907 corresponding to those given for 1913, 1914, and 1915 in Table P were given in Bulletins 151 and 168 of this bureau.

Descriptions of the specified occupations which appear in the tables of this chapter and of other occupations of the bar-mill department included in the two groups designated as: "Unclassified—productive," and "Unclassified—nonproductive," are to be found in the Glossary of Occupations, pages 501 to 506.

TABLE O.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR.  
YEARS, 1907 TO 1915—

[The figures for each group of

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |     |                      |    |                      |    |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-----|----------------------|----|----------------------|----|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60  | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Stockers:                         | 1907  | 93                   | 64.4                              | \$0.178                         | \$11.43                            |                                                | 8                    |                 | 8   | 65                   | 8  | 4                    |    |
| 2        | 8 plants.....                     | 1908  | 90                   | 64.1                              | .167                            | 10.72                              |                                                | 10                   |                 | 8   | 59                   | 13 |                      |    |
| 3        |                                   | 1909  | 88                   | 64.2                              | .168                            | 10.79                              |                                                | 8                    |                 | 8   | 69                   | 3  |                      |    |
| 4        |                                   | 1910  | 87                   | 64.3                              | .190                            | 12.17                              |                                                | 8                    |                 | 7   | 69                   | 3  |                      |    |
| 5        | 13 plants.....                    | 1910  | 170                  | 59.0                              | .250                            | 14.24                              | 27                                             | 42                   |                 | 7   | 86                   | 8  |                      |    |
| 6        |                                   | 1911  | 164                  | 59.6                              | .230                            | 13.41                              | 27                                             | 28                   | 13              | 20  | 70                   | 6  |                      |    |
| 7        | 15 plants.....                    | 1911  | 211                  | 60.9                              | .217                            | 12.94                              | 27                                             | 28                   | 13              | 44  | 72                   | 27 |                      |    |
| 8        |                                   | 1912  | 217                  | 60.9                              | .231                            | 13.79                              | 27                                             | 32                   | 4               | 59  | 67                   | 28 |                      |    |
| 9        | 17 plants.....                    | 1912  | 215                  | 60.9                              | .232                            | 13.88                              | 27                                             | 34                   | 8               | 45  | 73                   | 28 |                      |    |
| 10       |                                   | 1913  | 226                  | 60.6                              | .253                            | 15.12                              |                                                | 69                   | 4               | 44  | 102                  | 7  |                      |    |
| 11       | 31 plants.....                    | 1913  | 374                  | 60.2                              | .216                            | 12.89                              | 14                                             | 90                   | 4               | 128 | 133                  | 5  |                      |    |
| 12       |                                   | 1914  | 343                  | 59.9                              | .207                            | 12.34                              | 14                                             | 78                   |                 | 106 | 140                  | 5  |                      |    |
| 13       | 41 plants.....                    | 1914  | 603                  | 60.4                              | .199                            | 12.00                              | 14                                             | 187                  | 10              | 107 | 259                  | 26 |                      |    |
| 14       |                                   | 1915  | 582                  | 60.2                              | .198                            | 11.91                              | 8                                              | 177                  | 92              | 52  | 228                  | 25 |                      |    |
| 15       | Heaters:                          | 1907  | 121                  | 63.9                              | .508                            | 32.35                              | 3                                              | 6                    | 10              | 3   | 85                   | 12 |                      | 2  |
| 16       | 15 plants.....                    | 1908  | 112                  | 63.9                              | .467                            | 29.66                              | 3                                              | 14                   | 6               | 2   | 68                   | 17 |                      | 2  |
| 17       |                                   | 1909  | 112                  | 64.0                              | .488                            | 31.06                              | 3                                              | 14                   | 6               | 2   | 78                   | 5  | 2                    | 2  |
| 18       |                                   | 1910  | 142                  | 64.2                              | .502                            | 31.87                              | 3                                              | 16                   | 4               |     | 103                  | 10 | 4                    | 2  |
| 19       | 25 plants.....                    | 1910  | 217                  | 62.9                              | .507                            | 31.73                              | 18                                             | 25                   | 4               | 16  | 126                  | 22 | 4                    | 2  |
| 20       |                                   | 1911  | 180                  | 62.6                              | .512                            | 31.97                              | 18                                             | 26                   | 6               | 2   | 107                  | 17 | 2                    | 2  |
| 21       | 26 plants.....                    | 1911  | 184                  | 62.7                              | .510                            | 31.87                              | 18                                             | 26                   | 6               | 2   | 111                  | 17 | 2                    | 2  |
| 22       |                                   | 1912  | 199                  | 62.4                              | .482                            | 29.84                              | 18                                             | 12                   | 31              | 2   | 114                  | 18 | 2                    | 2  |
| 23       | 26 plants.....                    | 1912  | 196                  | 61.8                              | .499                            | 30.60                              | 18                                             | 28                   | 30              | 2   | 98                   | 16 | 2                    | 2  |
| 24       |                                   | 1913  | 211                  | 61.7                              | .560                            | 34.25                              | 3                                              | 45                   | 34              | 3   | 112                  | 9  | 3                    | 2  |
| 25       | 44 plants.....                    | 1913  | 295                  | 59.7                              | .590                            | 34.74                              | 29                                             | 66                   | 44              | 3   | 135                  | 9  | 7                    | 2  |
| 26       |                                   | 1914  | 272                  | 58.9                              | .559                            | 32.42                              | 36                                             | 65                   | 34              | 3   | 115                  | 11 | 6                    | 2  |
| 27       | 57 plants.....                    | 1914  | 409                  | 59.9                              | .548                            | 32.49                              | 36                                             | 80                   | 60              | 3   | 211                  | 9  | 8                    | 2  |
| 28       |                                   | 1915  | 392                  | 60.1                              | .562                            | 33.50                              | 36                                             | 68                   | 68              | 1   | 202                  | 12 | 3                    | 2  |
| 29       | Heaters' helpers:                 | 1907  | 167                  | 65.3                              | .246                            | 15.77                              | 3                                              | 8                    | 12              | 4   | 108                  | 26 | 6                    |    |
| 30       | 14 plants.....                    | 1908  | 153                  | 65.1                              | .227                            | 14.50                              | 3                                              | 16                   | 8               | 4   | 86                   | 32 | 4                    |    |
| 31       |                                   | 1909  | 151                  | 65.0                              | .234                            | 14.87                              | 3                                              | 16                   | 8               | 4   | 112                  | 2  | 6                    |    |
| 32       |                                   | 1910  | 166                  | 65.2                              | .262                            | 16.70                              | 3                                              | 16                   | 8               | 4   | 124                  | 3  | 4                    | 4  |
| 33       | 24 plants.....                    | 1910  | 295                  | 62.6                              | .273                            | 16.77                              | 48                                             | 23                   | 8               | 23  | 154                  | 31 | 4                    | 4  |
| 34       |                                   | 1911  | 281                  | 62.5                              | .262                            | 16.05                              | 48                                             | 26                   | 12              | 7   | 150                  | 30 | 8                    |    |
| 35       | 25 plants.....                    | 1911  | 293                  | 62.7                              | .259                            | 15.94                              | 48                                             | 26                   | 12              | 7   | 162                  | 30 | 8                    |    |
| 36       |                                   | 1912  | 319                  | 62.2                              | .260                            | 16.01                              | 45                                             | 29                   | 44              | 6   | 161                  | 30 | 4                    |    |
| 37       | 24 plants.....                    | 1912  | 318                  | 61.9                              | .251                            | 15.41                              | 45                                             | 21                   | 72              | 6   | 150                  | 20 | 4                    |    |
| 38       |                                   | 1913  | 324                  | 62.0                              | .273                            | 16.77                              | 3                                              | 63                   | 76              | 5   | 163                  | 10 | 2                    | 2  |
| 39       | 42 plants.....                    | 1913  | 467                  | 60.5                              | .269                            | 16.21                              | 37                                             | 96                   | 98              | 9   | 204                  | 21 |                      | 2  |
| 40       |                                   | 1914  | 427                  | 60.6                              | .264                            | 15.89                              | 31                                             | 95                   | 78              | 10  | 185                  | 26 |                      |    |
| 41       | 54 plants.....                    | 1914  | 582                  | 60.9                              | .265                            | 16.09                              | 35                                             | 116                  | 96              | 6   | 300                  | 27 |                      | 2  |
| 42       |                                   | 1915  | 870                  | 60.3                              | .272                            | 16.37                              | 65                                             | 87                   | 95              | 2   | 286                  | 31 | 2                    | 2  |
| 43       | Chargers and helpers:             | 1907  | 104                  | 65.5                              | .173                            | 11.34                              |                                                | 6                    | 4               | 5   | 71                   | 16 | 2                    |    |
| 44       | 12 plants.....                    | 1908  | 102                  | 65.6                              | .161                            | 10.56                              |                                                | 6                    | 4               | 5   | 67                   | 20 |                      |    |
| 45       |                                   | 1909  | 107                  | 65.9                              | .161                            | 10.60                              |                                                | 6                    | 4               | 4   | 80                   | 8  | 5                    |    |
| 46       |                                   | 1910  | 110                  | 66.3                              | .181                            | 11.87                              |                                                | 6                    | 4               | 4   | 86                   | 10 |                      |    |
| 47       | 18 plants.....                    | 1910  | 179                  | 65.3                              | .192                            | 12.40                              | 12                                             | 10                   | 4               | 12  | 106                  | 35 |                      |    |
| 48       |                                   | 1911  | 177                  | 65.1                              | .185                            | 12.02                              | 12                                             | 11                   | 10              | 5   | 106                  | 33 |                      |    |

AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
BAR MILLS.

years are for identical plants.]

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                |                                |                                 |                                  | 2                                | 6                                | 51                               | 12                               | 22                               |                                  |                                  |                                  |                                  |                                  |                            | 1           |
|                                               |                                |                                |                                 | 6                                | 8                                | 12                               | 34                               | 22                               | 8                                |                                  |                                  |                                  |                                  |                                  |                            | 2           |
|                                               |                                |                                |                                 | 2                                | 1                                | 32                               | 23                               | 18                               | 10                               | 2                                |                                  |                                  |                                  |                                  |                            | 3           |
|                                               |                                |                                |                                 |                                  | 2                                | 5                                | 28                               | 24                               | 28                               |                                  |                                  |                                  |                                  |                                  |                            | 4           |
|                                               |                                |                                |                                 |                                  | 2                                | 5                                | 28                               | 24                               | 51                               | 23                               | 16                               | 21                               |                                  |                                  |                            | 5           |
|                                               |                                |                                |                                 |                                  | 2                                | 4                                | 32                               | 28                               | 44                               | 19                               | 35                               |                                  |                                  |                                  |                            | 6           |
|                                               |                                |                                |                                 |                                  | 2                                | 4                                | 65                               | 38                               | 48                               | 19                               | 35                               |                                  |                                  |                                  |                            | 7           |
|                                               |                                |                                |                                 |                                  | 2                                | 5                                | 64                               | 15                               | 57                               | 37                               | 37                               |                                  |                                  |                                  |                            | 8           |
|                                               |                                |                                |                                 |                                  | 2                                | 5                                | 56                               | 19                               | 57                               | 39                               | 37                               |                                  |                                  |                                  |                            | 9           |
|                                               |                                |                                |                                 |                                  | 3                                |                                  | 1                                | 59                               | 60                               | 48                               | 43                               | 12                               |                                  |                                  |                            | 10          |
|                                               |                                |                                |                                 |                                  | 32                               | 5                                | 24                               | 91                               | 128                              | 60                               | 28                               | 6                                |                                  |                                  |                            | 11          |
|                                               |                                |                                |                                 |                                  | 34                               | 5                                | 51                               | 63                               | 131                              | 45                               | 14                               |                                  |                                  |                                  |                            | 12          |
|                                               |                                |                                |                                 | 3                                | 38                               | 40                               | 148                              | 83                               | 227                              | 50                               | 14                               |                                  |                                  |                                  |                            | 13          |
|                                               |                                |                                |                                 | 3                                | 40                               | 38                               | 126                              | 85                               | 233                              | 30                               | 26                               | 1                                |                                  |                                  |                            | 14          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 10                               | 25                               | 18                               | 43                               | 13                               | 12                         | 15          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 19                               | 14                               | 35                               | 25                               | 11                               | 7                          | 16          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 4                                | 4                                | 13                               | 34                               | 40                               | 11                               | 6                          | 17          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 11                               | 24                               | 36                               | 44                               | 12                               | 15                         | 18          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 16                               | 39                               | 55                               | 57                               | 31                               | 19                         | 19          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 13                               | 37                               | 31                               | 55                               | 26                               | 18                         | 20          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 13                               | 38                               | 34                               | 55                               | 26                               | 18                         | 21          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 4                                |                                  | 23                               | 45                               | 36                               | 41                               | 37                               | 13                         | 22          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 23                               | 43                               | 36                               | 41                               | 37                               | 16                         | 23          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 3                                | 26                               | 49                               | 47                               | 51                               | 34                         | 24          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 3                                | 36                               | 60                               | 65                               | 67                         | 25          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 5                                | 47                               | 69                               | 57                               | 38                               | 55                         | 26          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 3                                |                                  |                                  |                                  |                                  |                            | 27          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 8                                | 76                               | 112                              | 77                               | 58                               | 75                         | 28          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 5                                | 66                               | 88                               | 113                              | 55                               | 65                         | 29          |
|                                               |                                |                                |                                 |                                  |                                  | 10                               | 28                               | 36                               | 28                               | 30                               | 23                               | 8                                | 2                                | 2                                |                            | 30          |
|                                               |                                |                                |                                 |                                  |                                  | 14                               | 33                               | 36                               | 29                               | 15                               | 19                               | 5                                | 2                                |                                  |                            | 31          |
|                                               |                                |                                |                                 |                                  | 14                               | 6                                | 19                               | 31                               | 32                               | 27                               | 16                               | 4                                |                                  | 2                                |                            | 32          |
|                                               |                                |                                |                                 |                                  |                                  | 10                               | 21                               | 10                               | 60                               | 26                               | 18                               | 11                               | 8                                | 2                                |                            | 33          |
|                                               |                                |                                |                                 |                                  | 2                                | 15                               | 21                               | 21                               | 89                               | 49                               | 74                               | 11                               | 11                               | 2                                |                            | 34          |
|                                               |                                |                                |                                 |                                  |                                  | 13                               | 25                               | 24                               | 97                               | 45                               | 57                               | 10                               | 10                               |                                  |                            | 35          |
|                                               |                                |                                |                                 |                                  |                                  | 17                               | 27                               | 24                               | 100                              | 47                               | 58                               | 10                               | 10                               |                                  |                            | 36          |
|                                               |                                |                                |                                 |                                  |                                  | 21                               | 18                               | 35                               | 95                               | 64                               | 64                               | 16                               | 2                                | 4                                |                            | 37          |
|                                               |                                |                                |                                 |                                  |                                  | 21                               | 18                               | 43                               | 98                               | 64                               | 66                               | 8                                |                                  |                                  |                            | 38          |
|                                               |                                |                                |                                 |                                  |                                  | 13                               | 12                               | 29                               | 106                              | 66                               | 77                               | 19                               | 2                                |                                  |                            | 39          |
|                                               |                                |                                |                                 |                                  |                                  | 28                               | 33                               | 39                               | 142                              | 70                               | 112                              | 39                               | 4                                |                                  |                            | 40          |
|                                               |                                |                                |                                 |                                  | 1                                | 12                               | 35                               | 41                               | 128                              | 80                               | 104                              | 18                               | 8                                |                                  |                            | 41          |
|                                               |                                |                                |                                 |                                  |                                  | 1                                | 12                               | 39                               | 50                               | 183                              | 139                              | 118                              | 30                               | 10                               |                            | 42          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 20                               | 30                               | 41                               | 166                              | 140                              | 127                              | 36                               | 4                                | 6                          | 43          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                | 48                               | 30                               | 8                                | 10                               | 5                                | 1                                |                                  |                                  |                            | 44          |
|                                               |                                |                                |                                 |                                  | 1                                | 58                               | 25                               | 11                               | 5                                |                                  |                                  |                                  |                                  |                                  |                            | 45          |
|                                               |                                |                                |                                 |                                  |                                  | 16                               | 51                               | 20                               | 12                               | 8                                |                                  |                                  |                                  |                                  |                            | 46          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 24                               | 50                               | 18                               | 10                               | 8                                |                                  |                                  |                                  |                            | 47          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 24                               | 62                               | 44                               | 25                               |                                  |                                  |                                  |                                  |                            | 48          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 38                               | 69                               | 24                               | 38                               | 6                                | 2                                |                                  |                                  |                            |             |

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TABLE O.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1907 TO 1915—

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Chargers and helpers—Concluded.   | 1911  | 185                  | 64.8                              | \$0.184                         | \$11.90                            | 12                                             | 15                   | 10              | 5  | 110                  | 33 |                      |    |
| 2        | 19 plants.....                    | 1912  | 182                  | 65.0                              | .192                            | 12.45                              | 9                                              | 17                   | 6               | 6  | 111                  | 33 |                      |    |
| 3        | 19 plants.....                    | 1912  | 181                  | 64.3                              | .199                            | 12.72                              | 12                                             | 13                   | 26              | 6  | 88                   | 36 |                      |    |
| 4        | 19 plants.....                    | 1913  | 185                  | 63.7                              | .224                            | 14.17                              |                                                | 26                   | 26              | 7  | 110                  | 16 |                      |    |
| 5        | 31 plants.....                    | 1913  | 262                  | 62.5                              | .226                            | 14.00                              | 10                                             | 34                   | 37              | 6  | 165                  | 8  | 2                    |    |
| 6        | 31 plants.....                    | 1914  | 233                  | 62.2                              | .230                            | 13.58                              | 10                                             | 33                   | 36              | 4  | 144                  | 4  | 2                    |    |
| 7        | 41 plants.....                    | 1914  | 346                  | 61.9                              | .219                            | 13.47                              | 13                                             | 46                   | 63              | 4  | 214                  | 4  | 2                    |    |
| 8        | 41 plants.....                    | 1915  | 333                  | 61.7                              | .222                            | 13.56                              | 29                                             | 30                   | 60              | 1  | 205                  | 6  | 2                    |    |
| 9        | Drag-downs:                       | 1907  | 86                   | 64.4                              | .271                            | 17.31                              |                                                | 8                    | 8               |    | 52                   | 16 | 2                    |    |
| 10       | 11 plants.....                    | 1908  | 82                   | 63.9                              | .246                            | 15.58                              |                                                | 16                   | 4               |    | 43                   | 19 |                      |    |
| 11       | 11 plants.....                    | 1909  | 83                   | 64.0                              | .250                            | 15.93                              |                                                | 16                   | 4               |    | 58                   | 3  | 2                    |    |
| 12       | 11 plants.....                    | 1910  | 89                   | 64.0                              | .236                            | 18.19                              |                                                | 16                   | 4               |    | 62                   | 3  | 4                    |    |
| 13       | 19 plants.....                    | 1910  | 132                  | 65.1                              | .269                            | 17.44                              |                                                | 20                   | 4               | 4  | 75                   | 25 | 4                    |    |
| 14       | 19 plants.....                    | 1911  | 123                  | 64.9                              | .262                            | 16.88                              |                                                | 23                   | 5               |    | 68                   | 25 | 2                    |    |
| 15       | 20 plants.....                    | 1911  | 127                  | 64.7                              | .262                            | 16.78                              |                                                | 25                   | 5               |    | 70                   | 25 | 2                    |    |
| 16       | 20 plants.....                    | 1912  | 130                  | 64.3                              | .253                            | 16.12                              |                                                | 27                   | 6               |    | 70                   | 25 | 2                    |    |
| 17       | 20 plants.....                    | 1912  | 121                  | 63.8                              | .251                            | 15.81                              |                                                | 24                   | 20              |    | 54                   | 21 | 2                    |    |
| 18       | 20 plants.....                    | 1913  | 124                  | 63.1                              | .281                            | 17.57                              |                                                | 24                   | 19              | 2  | 68                   | 9  | 2                    |    |
| 19       | 33 plants.....                    | 1913  | 186                  | 60.8                              | .282                            | 16.98                              | 16                                             | 34                   | 36              | 1  | 82                   | 13 | 4                    |    |
| 20       | 33 plants.....                    | 1914  | 174                  | 60.7                              | .272                            | 16.26                              | 17                                             | 29                   | 38              | 1  | 71                   | 16 | 2                    |    |
| 21       | 45 plants.....                    | 1914  | 265                  | 60.7                              | .277                            | 16.58                              | 17                                             | 54                   | 47              |    | 130                  | 15 | 2                    |    |
| 22       | 45 plants.....                    | 1915  | 256                  | 61.1                              | .280                            | 16.96                              | 14                                             | 51                   | 42              |    | 130                  | 17 | 2                    |    |
| 23       | Roll engineers:                   | 1907  | 58                   | 72.3                              | .226                            | 16.29                              |                                                |                      |                 |    | 31                   | 5  | 18                   | 4  |
| 24       | 13 plants.....                    | 1908  | 56                   | 71.4                              | .221                            | 15.76                              |                                                |                      |                 |    | 28                   | 10 | 16                   | 2  |
| 25       | 13 plants.....                    | 1909  | 56                   | 71.5                              | .217                            | 15.52                              |                                                |                      |                 |    | 30                   | 6  | 18                   | 2  |
| 26       | 13 plants.....                    | 1910  | 58                   | 71.7                              | .230                            | 16.52                              |                                                |                      |                 |    | 32                   | 4  | 19                   | 3  |
| 27       | 22 plants.....                    | 1910  | 99                   | 72.0                              | .229                            | 16.46                              |                                                |                      |                 | 3  | 40                   | 26 | 23                   | 7  |
| 28       | 22 plants.....                    | 1911  | 95                   | 70.4                              | .228                            | 16.07                              |                                                |                      |                 | 3  | 54                   | 13 | 23                   | 2  |
| 29       | 22 plants.....                    | 1912  | 97                   | 70.0                              | .229                            | 16.05                              |                                                | 4                    |                 | 1  | 51                   | 12 | 27                   | 2  |
| 30       | 20 plants.....                    | 1912  | 93                   | 70.1                              | .228                            | 16.02                              |                                                | 4                    |                 | 1  | 49                   | 12 | 25                   | 2  |
| 31       | 20 plants.....                    | 1913  | 97                   | 70.5                              | .249                            | 17.56                              |                                                | 6                    |                 | 2  | 39                   | 9  | 39                   | 2  |
| 32       | 41 plants.....                    | 1913  | 153                  | 69.2                              | .247                            | 17.06                              |                                                | 3                    | 8               | 9  | 69                   | 25 | 33                   | 6  |
| 33       | 41 plants.....                    | 1914  | 149                  | 68.7                              | .248                            | 17.02                              |                                                | 3                    | 6               | 11 | 65                   | 36 | 24                   | 4  |
| 34       | 52 plants.....                    | 1914  | 183                  | 68.8                              | .247                            | 16.97                              |                                                | 3                    | 8               | 9  | 86                   | 48 | 21                   | 8  |
| 35       | 52 plants.....                    | 1915  | 178                  | 68.6                              | .246                            | 16.77                              |                                                | 3                    | 8               | 7  | 87                   | 48 | 21                   | 4  |
| 36       | Rollers, 8-inch:                  | 1907  | 16                   | 62.5                              | 1.089                           | 68.27                              |                                                | 3                    | 3               | 2  | 6                    | 1  | 1                    |    |
| 37       | 7 plants.....                     | 1908  | 16                   | 62.6                              | .970                            | 60.88                              |                                                | 3                    | 3               | 2  | 6                    | 1  | 1                    |    |
| 38       | 7 plants.....                     | 1909  | 16                   | 62.5                              | .956                            | 60.31                              |                                                | 3                    | 3               | 2  | 7                    | 1  |                      |    |
| 39       | 7 plants.....                     | 1910  | 15                   | 62.7                              | 1.028                           | 64.69                              |                                                | 4                    | 1               | 2  | 8                    |    |                      |    |
| 40       | 11 plants.....                    | 1910  | 28                   | 59.0                              | .961                            | 57.71                              | 6                                              | 6                    | 2               | 2  | 12                   |    |                      |    |
| 41       | 11 plants.....                    | 1911  | 29                   | 58.0                              | .929                            | 55.00                              | 6                                              | 7                    | 4               | 2  | 9                    | 1  |                      |    |
| 42       | 11 plants.....                    | 1912  | 29                   | 58.0                              | .887                            | 52.81                              | 6                                              | 7                    | 4               | 2  | 9                    | 1  |                      |    |
| 43       | 11 plants.....                    | 1913  | 29                   | 58.1                              | 1.070                           | 62.33                              | 2                                              | 13                   | 2               | 2  | 9                    | 1  |                      |    |
| 44       | 15 plants.....                    | 1913  | 35                   | 58.0                              | 1.055                           | 62.31                              | 4                                              | 13                   | 4               | 2  | 11                   |    | 1                    |    |
| 45       | 15 plants.....                    | 1914  | 34                   | 58.9                              | .943                            | 56.59                              | 4                                              | 10                   | 4               | 4  | 11                   |    | 1                    |    |
| 46       | 20 plants.....                    | 1914  | 44                   | 59.1                              | .912                            | 54.60                              | 4                                              | 15                   | 3               | 5  | 16                   |    | 1                    |    |
| 47       | 20 plants.....                    | 1915  | 43                   | 59.3                              | .987                            | 59.46                              | 8                                              | 9                    | 2               | 6  | 17                   |    | 1                    |    |
| 48       | Rollers, 9-inch:                  | 1907  | 12                   | 66.7                              | 1.028                           | 69.72                              |                                                |                      |                 |    | 3                    | 7  | 2                    |    |
| 49       | 6 plants.....                     | 1908  | 11                   | 67.7                              | .809                            | 55.06                              |                                                |                      |                 |    | 2                    | 7  | 2                    |    |
| 50       | 6 plants.....                     | 1909  | 11                   | 67.1                              | .832                            | 56.25                              |                                                |                      |                 |    | 2                    | 8  | 1                    |    |
| 51       | 6 plants.....                     | 1910  | 12                   | 67.0                              | .969                            | 65.03                              |                                                |                      |                 |    | 1                    | 10 | 1                    |    |

AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No.         |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|---------------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. | Line<br>No.         |
|                                               |                                |                                |                                 |                                  |                                  | 42<br>23                         | 73<br>87                         | 24<br>18                         | 38<br>28                         | 6<br>24                          | 2<br>2                           |                                  |                                  |                                  |                            | 1<br>2              |
|                                               |                                |                                |                                 |                                  |                                  | 22<br>1                          | 70<br>27                         | 20<br>52                         | 40<br>65                         | 27<br>23                         | 2<br>10                          |                                  |                                  |                                  |                            | 3<br>4              |
|                                               |                                |                                |                                 |                                  |                                  | 4<br>4                           | 44<br>46                         | 64<br>39                         | 85<br>96                         | 40<br>35                         | 13<br>13                         | 11                               |                                  | 1                                |                            | 5<br>6              |
|                                               |                                |                                |                                 |                                  |                                  | 14<br>16                         | 49<br>50                         | 51<br>56                         | 160<br>126                       | 54<br>45                         | 18<br>29                         |                                  |                                  |                                  |                            | 7<br>8              |
|                                               |                                |                                | 4                               |                                  |                                  | 9<br>10<br>16<br>6               | 4<br>8<br>6<br>6                 | 10<br>5<br>5<br>14               | 19<br>15<br>14<br>10             | 14<br>13<br>20<br>21             | 20<br>15<br>18<br>24             | 6<br>4<br>4                      |                                  | 4<br>6                           |                            | 9<br>10<br>11<br>12 |
|                                               |                                |                                |                                 | 2                                | 8                                | 6<br>4                           | 8<br>8                           | 20<br>5                          | 34<br>42                         | 27<br>35                         | 29<br>15                         | 4<br>4                           |                                  |                                  |                            | 4<br>4              |
|                                               |                                |                                |                                 |                                  |                                  | 4<br>2                           | 6<br>20                          | 8<br>4                           | 5<br>31                          | 37<br>27                         | 15<br>28                         | 4<br>8                           |                                  |                                  |                            | 15<br>16            |
|                                               |                                |                                |                                 |                                  |                                  | 2<br>4                           | 14<br>4                          | 4<br>1                           | 10<br>9                          | 32<br>38                         | 31<br>26                         | 24<br>35                         | 4<br>11                          |                                  |                            | 17<br>18            |
|                                               |                                |                                |                                 |                                  |                                  | 4<br>4                           | 1<br>12                          | 10<br>8                          | 10<br>49                         | 31<br>29                         | 65<br>52                         | 16<br>15                         |                                  |                                  |                            | 19<br>20            |
|                                               |                                |                                |                                 |                                  |                                  | 4<br>4                           | 5<br>4                           | 3<br>6                           | 13<br>8                          | 77<br>77                         | 48<br>48                         | 86<br>77                         | 21<br>15                         |                                  |                            | 21<br>22            |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 4<br>4                           | 5<br>6                           | 33<br>35                         | 16<br>11                         |                                  |                                  |                                  |                                  |                            | 23<br>24            |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 4<br>4                           | 12<br>4                          | 30<br>4                          | 10<br>36                         |                                  |                                  |                                  |                                  |                            | 25<br>26            |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 4<br>6                           | 10<br>8                          | 59<br>59                         | 26<br>22                         |                                  |                                  |                                  |                                  |                            | 27<br>28            |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 5<br>8                           | 8<br>63                          | 61<br>30                         | 19<br>57                         |                                  |                                  |                                  |                                  |                            | 29<br>30            |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 4<br>9                           | 8<br>9                           | 39<br>37                         | 73<br>67                         | 21<br>26                         |                                  |                                  |                                  |                            | 31<br>32            |
|                                               |                                |                                |                                 |                                  |                                  | 2<br>6                           | 14<br>12                         | 8<br>9                           | 51<br>47                         | 76<br>75                         | 32<br>29                         |                                  |                                  |                                  |                            | 33<br>34            |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 35<br>36            |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 37<br>38            |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 39<br>40            |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 41<br>42            |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 43<br>44            |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 45<br>46            |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 47<br>48            |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 49<br>50            |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 51<br>52            |

TABLE O.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1907 TO 1915—

| Line No. | Occupation, and number of plants.       | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |       |                      |       |                      |       |
|----------|-----------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-------|----------------------|-------|----------------------|-------|
|          |                                         |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60    | Over 60 and under 72 | 72    | Over 72 and under 84 | 84    |
| 1        | Rollers, 9-inch—Con.                    | 1910  | 24                   | 63.2                              | \$0.943                         | \$60.20                            | 3                                              | 1                    | .....           | 5     | 12                   | 3     | .....                | ..... |
| 2        | 11 plants.....                          | 1911  | 22                   | 63.5                              | .823                            | 53.07                              | 3                                              | 1                    | .....           | 4     | 11                   | 3     | .....                | ..... |
| 3        |                                         | 1912  | 23                   | 63.1                              | .808                            | 51.36                              | 3                                              | 1                    | .....           | 5     | 11                   | 3     | .....                | ..... |
| 4        | 10 plants.....                          | 1912  | 22                   | 63.0                              | .812                            | 51.60                              | 3                                              | 1                    | .....           | 5     | 10                   | 3     | .....                | ..... |
| 5        |                                         | 1913  | 22                   | 62.8                              | .932                            | 59.16                              | .....                                          | 4                    | .....           | 6     | 10                   | 2     | .....                | ..... |
| 6        | 15 plants.....                          | 1913  | 29                   | 61.4                              | .913                            | 56.41                              | 1                                              | 6                    | 4               | 5     | 11                   | 2     | .....                | ..... |
| 7        |                                         | 1914  | 29                   | 61.4                              | .868                            | 53.45                              | 1                                              | 6                    | 4               | 5     | 11                   | 2     | .....                | ..... |
| 8        | 16 plants.....                          | 1914  | 32                   | 61.0                              | .878                            | 54.11                              | 1                                              | 7                    | 4               | 6     | 13                   | 1     | .....                | ..... |
| 9        |                                         | 1915  | 32                   | 60.7                              | .924                            | 56.81                              | 3                                              | 5                    | 4               | 6     | 14                   | ..... | .....                | ..... |
| 10       | Rollers, 10-inch:                       | 1907  | 12                   | 67.3                              | 1.114                           | 76.01                              | .....                                          | .....                | 2               | 2     | 4                    | 2     | 2                    | ..... |
| 11       | 5 plants.....                           | 1908  | 12                   | 67.3                              | .974                            | 66.06                              | .....                                          | .....                | 2               | 2     | 4                    | 2     | 2                    | ..... |
| 12       |                                         | 1909  | 12                   | 67.0                              | 1.095                           | 73.38                              | .....                                          | .....                | 2               | 2     | 5                    | 3     | .....                | ..... |
| 13       |                                         | 1910  | 12                   | 67.0                              | 1.183                           | 79.72                              | .....                                          | .....                | 2               | 2     | 7                    | 1     | .....                | ..... |
| 14       | 7 plants.....                           | 1910  | 18                   | 65.0                              | 1.069                           | 70.38                              | .....                                          | 4                    | .....           | 2     | 9                    | 3     | .....                | ..... |
| 15       |                                         | 1911  | 18                   | 63.6                              | .967                            | 56.28                              | .....                                          | 5                    | .....           | 2     | 6                    | 5     | .....                | ..... |
| 16       |                                         | 1912  | 18                   | 63.6                              | 1.066                           | 68.13                              | .....                                          | 5                    | .....           | 2     | 6                    | 5     | .....                | ..... |
| 17       | 7 plants.....                           | 1912  | 18                   | 62.1                              | 1.068                           | 67.18                              | .....                                          | 5                    | 2               | 2     | 6                    | 3     | .....                | ..... |
| 18       |                                         | 1913  | 18                   | 61.9                              | 1.132                           | 71.56                              | .....                                          | 5                    | 2               | 2     | 6                    | 3     | .....                | ..... |
| 19       | 13 plants.....                          | 1913  | 27                   | 58.5                              | 1.150                           | 68.08                              | 3                                              | 7                    | 6               | 2     | 7                    | ..... | 2                    | ..... |
| 20       |                                         | 1914  | 27                   | 58.2                              | 1.069                           | 62.92                              | 3                                              | 7                    | 6               | 2     | 7                    | ..... | 2                    | ..... |
| 21       | 21 plants.....                          | 1914  | 44                   | 58.6                              | 1.049                           | 62.64                              | 3                                              | 15                   | 5               | 3     | 16                   | ..... | 2                    | ..... |
| 22       |                                         | 1915  | 44                   | 58.5                              | .999                            | 59.18                              | 6                                              | 13                   | 3               | 3     | 17                   | ..... | 2                    | ..... |
| 23       | Rollers, 12-inch:                       | 1907  | 15                   | 68.1                              | .900                            | 61.69                              | .....                                          | .....                | .....           | 2     | 6                    | 7     | .....                | ..... |
| 24       | 7 plants.....                           | 1908  | 13                   | 69.9                              | .801                            | 55.63                              | .....                                          | .....                | .....           | 6     | 7                    | ..... | .....                | ..... |
| 25       |                                         | 1909  | 13                   | 69.8                              | .864                            | 60.16                              | .....                                          | .....                | .....           | 8     | 5                    | ..... | .....                | ..... |
| 26       |                                         | 1910  | 15                   | 68.5                              | .888                            | 61.05                              | .....                                          | .....                | .....           | 1     | 9                    | 5     | .....                | ..... |
| 27       | 13 plants.....                          | 1910  | 27                   | 64.4                              | .864                            | 56.26                              | 3                                              | 2                    | .....           | 3     | 12                   | 7     | .....                | ..... |
| 28       |                                         | 1911  | 24                   | 64.9                              | .844                            | 54.85                              | 3                                              | 1                    | 1               | ..... | 12                   | 7     | .....                | ..... |
| 29       |                                         | 1912  | 26                   | 64.3                              | .831                            | 53.75                              | 3                                              | 2                    | 1               | 1     | 12                   | 7     | .....                | ..... |
| 30       | 12 plants.....                          | 1912  | 27                   | 64.7                              | .837                            | 54.44                              | 3                                              | 2                    | 1               | 1     | 11                   | 9     | .....                | ..... |
| 31       |                                         | 1913  | 28                   | 64.4                              | .961                            | 61.47                              | 1                                              | 4                    | 1               | 3     | 11                   | 8     | .....                | ..... |
| 32       | 19 plants.....                          | 1913  | 38                   | 61.6                              | .936                            | 57.96                              | 1                                              | 12                   | 1               | 2     | 17                   | 5     | .....                | ..... |
| 33       |                                         | 1914  | 35                   | 61.8                              | .807                            | 50.13                              | 1                                              | 12                   | .....           | 2     | 14                   | 6     | .....                | ..... |
| 34       | 24 plants.....                          | 1914  | 44                   | 61.0                              | .881                            | 53.57                              | 2                                              | 16                   | .....           | 3     | 17                   | 6     | .....                | ..... |
| 35       |                                         | 1915  | 43                   | 60.8                              | .933                            | 56.58                              | 3                                              | 15                   | .....           | 2     | 18                   | 5     | .....                | ..... |
| 36       | Rollers, 13-inch, 14-inch, and 15-inch: | 1910  | 7                    | 60.6                              | .835                            | 48.77                              | 3                                              | .....                | .....           | ..... | 2                    | 2     | .....                | ..... |
| 37       | 3 plants.....                           | 1911  | 7                    | 60.6                              | .676                            | 39.73                              | 3                                              | .....                | .....           | ..... | 2                    | 2     | .....                | ..... |
| 38       |                                         | 1912  | 7                    | 60.6                              | .709                            | 42.11                              | 3                                              | .....                | .....           | ..... | 2                    | 2     | .....                | ..... |
| 39       | 4 plants.....                           | 1912  | 9                    | 63.1                              | .637                            | 38.91                              | 3                                              | .....                | .....           | ..... | 2                    | 4     | .....                | ..... |
| 40       |                                         | 1913  | 9                    | 62.7                              | .676                            | 40.90                              | .....                                          | 3                    | .....           | 1     | 2                    | 3     | .....                | ..... |
| 41       | 5 plants.....                           | 1913  | 10                   | 62.4                              | .685                            | 41.42                              | .....                                          | 3                    | .....           | 2     | 2                    | 3     | .....                | ..... |
| 42       |                                         | 1914  | 10                   | 62.4                              | .612                            | 37.67                              | .....                                          | 3                    | .....           | 2     | 2                    | 3     | .....                | ..... |
| 43       | 7 plants.....                           | 1914  | 13                   | 61.6                              | .703                            | 42.78                              | .....                                          | 4                    | .....           | 2     | 4                    | 3     | .....                | ..... |
| 44       |                                         | 1915  | 14                   | 60.4                              | .686                            | 40.99                              | 3                                              | 2                    | .....           | 2     | 5                    | 2     | .....                | ..... |
| 45       | Rollers, 16-inch:                       | 1907  | 7                    | 63.3                              | .897                            | 58.11                              | .....                                          | .....                | 2               | 1     | 4                    | ..... | .....                | ..... |
| 46       | 4 plants.....                           | 1908  | 7                    | 63.3                              | .868                            | 56.00                              | .....                                          | .....                | 2               | 1     | 4                    | ..... | .....                | ..... |
| 47       |                                         | 1909  | 7                    | 63.3                              | .850                            | 54.77                              | .....                                          | .....                | 2               | 1     | 4                    | ..... | .....                | ..... |
| 48       |                                         | 1910  | 9                    | 62.3                              | 1.074                           | 68.32                              | .....                                          | .....                | 3               | 1     | 5                    | ..... | .....                | ..... |
| 49       | 5 plants.....                           | 1910  | 11                   | 62.6                              | 1.007                           | 64.13                              | .....                                          | .....                | 3               | 2     | 6                    | ..... | .....                | ..... |
| 50       |                                         | 1911  | 8                    | 63.9                              | 1.081                           | 70.85                              | .....                                          | .....                | 2               | 1     | 5                    | ..... | .....                | ..... |



AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                | 8                                | 14                         | 1           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 2                                | 2                                | 4                                | 13                         | 2           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 15                         | 3           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 2                                | 14                         | 4           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 2                                | 3                                | 16                         | 5           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 4                                | 21                         | 6           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 3                                | 4                                | 19                         | 7           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 4                                | 3                                | 4                                | 20                         | 8           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 4                                | 3                                | 22                         | 9           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 10                         | 10          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 9                          | 11          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  | 11                         | 12          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 11                         | 13          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 17                         | 14          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 15                         | 15          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                |                                  | 17                         | 16          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 17                         | 17          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 18                         | 18          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 27                         | 19          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 26                         | 20          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  |                                  | 39                         | 21          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 2                                | 3                                | 38                         | 22          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 11                         | 23          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  | 2                                | 2                                | 8                          | 24          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 9                          | 25          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  |                                  | 3                                | 11                         | 26          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  | 1                                | 6                                | 19                         | 27          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 3                                | 17                         | 28          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  |                                  | 5                                | 2                                | 18                         | 29          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 18                         | 30          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 5                                | 4                                | 24                         | 31          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 4                                | 33                         | 32          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 8                                | 23                         | 33          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 2                                | 9                                | 30                         | 34          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 5                                | 36                         | 35          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  | 5                          | 36          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  | 4                                | 1                          | 37          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 3                                | 2                          | 38          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  | 2                                | 3                                | 2                          | 39          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                |                                  |                                  | 5                          | 40          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                |                                  |                                  | 6                          | 41          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 4                          | 42          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 2                                | 7                          | 43          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  | 7                                | 5                          | 44          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 4                          | 45          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 4                          | 46          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 5                          | 47          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 2                          | 48          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 2                                | 8                          | 49          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 6                          | 50          |

TABLE O.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1907 TO 1915—

| Line No. | Occupation and number of plants.    | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|-------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                     |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Rollers, 16-inch—Con. 6 plants..... | 1911  | 12                   | 62.8                              | \$0.929                         | \$59.52                            |                                                | 2                    | 2               | 1  | 7                    |    |                      |    |
| 2        |                                     | 1912  | 12                   | 62.4                              | .814                            | 51.35                              |                                                | 2                    | 2               | 2  | 6                    |    |                      |    |
| 3        | 5 plants.....                       | 1912  | 11                   | 61.7                              | .787                            | 48.92                              |                                                | 2                    | 2               | 1  | 6                    |    |                      |    |
| 4        |                                     | 1913  | 11                   | 61.5                              | .998                            | 62.00                              |                                                | 2                    | 2               | 1  | 6                    |    |                      |    |
| 5        | 11 plants.....                      | 1913  | 21                   | 57.1                              | 1.003                           | 58.04                              | 5                                              | 4                    | 3               | 3  | 5                    | 1  |                      |    |
| 6        |                                     | 1914  | 18                   | 57.3                              | 1.003                           | 57.66                              | 4                                              | 4                    | 2               | 3  | 4                    | 1  |                      |    |
| 7        | 16 plants.....                      | 1914  | 26                   | 59.1                              | 1.036                           | 61.53                              | 4                                              | 5                    | 2               | 5  | 8                    | 2  |                      |    |
| 8        |                                     | 1915  | 27                   | 59.0                              | .928                            | 56.45                              | 4                                              | 5                    | 3               | 4  | 9                    | 2  |                      |    |
| 9        | Rollers, 18-inch: 2 plants.....     | 1907  | 3                    | 61.0                              | .942                            | 58.06                              |                                                |                      | 1               | 1  | 1                    |    |                      |    |
| 10       |                                     | 1908  | 4                    | 58.3                              | .684                            | 39.66                              |                                                | 2                    |                 | 1  | 1                    |    |                      |    |
| 11       |                                     | 1909  | 4                    | 58.3                              | .753                            | 43.79                              |                                                | 2                    |                 | 1  | 1                    |    |                      |    |
| 12       |                                     | 1910  | 4                    | 58.3                              | .860                            | 49.92                              |                                                | 2                    |                 |    | 2                    |    |                      |    |
| 13       | 5 plants.....                       | 1910  | 9                    | 60.8                              | .669                            | 40.08                              |                                                | 2                    |                 | 2  | 5                    |    |                      |    |
| 14       |                                     | 1911  | 8                    | 60.3                              | .771                            | 46.69                              |                                                | 2                    | 1               | 1  | 4                    |    |                      |    |
| 15       |                                     | 1912  | 9                    | 59.1                              | .761                            | 44.76                              |                                                | 4                    |                 |    | 1                    | 4  |                      |    |
| 16       | 7 plants.....                       | 1912  | 12                   | 58.7                              | .886                            | 52.19                              |                                                | 5                    | 2               | 1  | 4                    |    |                      |    |
| 17       |                                     | 1913  | 13                   | 58.8                              | .975                            | 57.83                              |                                                | 4                    | 3               | 2  | 4                    |    |                      |    |
| 18       | 7 plants.....                       | 1913  | 13                   | 54.7                              | .956                            | 53.10                              | 3                                              | 3                    | 3               | 2  | 2                    |    |                      |    |
| 19       |                                     | 1914  | 12                   | 54.7                              | .959                            | 53.42                              | 3                                              | 3                    | 2               | 2  | 2                    |    |                      |    |
| 20       | 8 plants.....                       | 1914  | 13                   | 54.9                              | .993                            | 55.47                              | 3                                              | 4                    | 2               | 2  | 2                    |    |                      |    |
| 21       |                                     | 1915  | 12                   | 54.6                              | 1.013                           | 57.55                              | 3                                              | 3                    | 3               | 1  | 2                    |    |                      |    |
| 22       | Rollers, all sizes: 13 plants.....  | 1907  | 65                   | 65.5                              | 1.013                           | 66.88                              |                                                | 3                    | 8               | 11 | 28                   | 12 | 3                    |    |
| 23       |                                     | 1908  | 63                   | 65.7                              | .878                            | 57.88                              |                                                | 5                    | 7               | 8  | 28                   | 12 | 3                    |    |
| 24       |                                     | 1909  | 63                   | 65.5                              | .917                            | 60.40                              |                                                | 5                    | 7               | 8  | 33                   | 10 |                      |    |
| 25       |                                     | 1910  | 67                   | 65.2                              | 1.010                           | 66.23                              |                                                | 6                    | 6               | 7  | 41                   | 7  |                      |    |
| 26       | 22 plants.....                      | 1910  | 124                  | 62.4                              | .928                            | 58.21                              | 15                                             | 15                   | 5               | 16 | 58                   | 15 |                      |    |
| 27       |                                     | 1911  | 116                  | 62.0                              | .882                            | 55.26                              | 15                                             | 16                   | 8               | 10 | 49                   | 18 |                      |    |
| 28       | 23 plants.....                      | 1911  | 120                  | 62.0                              | .873                            | 54.65                              | 15                                             | 18                   | 8               | 10 | 51                   | 18 |                      |    |
| 29       |                                     | 1912  | 124                  | 61.7                              | .860                            | 53.63                              | 15                                             | 21                   | 7               | 13 | 50                   | 18 |                      |    |
| 30       | 24 plants.....                      | 1912  | 128                  | 61.6                              | .863                            | 53.60                              | 15                                             | 22                   | 11              | 12 | 48                   | 20 |                      |    |
| 31       |                                     | 1913  | 130                  | 61.5                              | .989                            | 60.71                              | 3                                              | 35                   | 10              | 17 | 48                   | 17 |                      |    |
| 32       | 42 plants.....                      | 1913  | 173                  | 59.3                              | .985                            | 58.85                              |                                                | 44                   | 53              |    | 74                   | 2  |                      |    |
| 33       |                                     | 1914  | 165                  | 59.6                              | .909                            | 54.44                              |                                                | 37                   | 36              |    | 90                   | 2  |                      |    |
| 34       | 56 plants.....                      | 1914  | 216                  | 59.6                              | .936                            | 56.13                              |                                                | 34                   | 72              |    | 110                  |    |                      |    |
| 35       |                                     | 1915  | 215                  | 59.4                              | .944                            | 56.75                              |                                                | 39                   | 70              |    | 106                  |    |                      |    |
| 36       | Roughers, 8-inch: 7 plants.....     | 1907  | 44                   | 61.2                              | .397                            | 24.40                              |                                                | 15                   | 8               |    | 15                   | 6  |                      |    |
| 37       |                                     | 1908  | 44                   | 61.2                              | .373                            | 22.76                              |                                                | 15                   | 8               |    | 15                   | 6  |                      |    |
| 38       |                                     | 1909  | 44                   | 61.0                              | .363                            | 22.28                              |                                                | 15                   | 8               |    | 21                   |    |                      |    |
| 39       |                                     | 1910  | 41                   | 61.2                              | .393                            | 24.14                              |                                                | 15                   | 5               |    | 21                   |    |                      |    |
| 40       | 11 plants.....                      | 1910  | 84                   | 57.5                              | .368                            | 21.49                              | 24                                             | 19                   | 8               |    | 33                   |    |                      |    |
| 41       |                                     | 1911  | 81                   | 56.0                              | .347                            | 19.68                              | 24                                             | 25                   | 11              |    | 21                   |    |                      |    |
| 42       |                                     | 1912  | 79                   | 56.0                              | .336                            | 19.03                              | 24                                             | 23                   | 11              |    | 21                   |    |                      |    |
| 43       |                                     | 1913  | 79                   | 56.4                              | .391                            | 22.32                              |                                                | 47                   | 17              |    | 15                   |    |                      |    |
| 44       | 10 plants.....                      | 1913  | 32                   | 57.3                              | .414                            | 23.49                              | 2                                              | 11                   | 14              |    | 5                    |    |                      |    |
| 45       |                                     | 1914  | 32                   | 56.0                              | .402                            | 22.21                              | 8                                              | 4                    | 12              | 1  | 7                    |    |                      |    |
| 46       | 15 plants.....                      | 1914  | 51                   | 57.7                              | .399                            | 22.80                              | 8                                              | 12                   | 11              | 1  | 19                   |    |                      |    |
| 47       |                                     | 1915  | 49                   | 60.0                              | .425                            | 25.36                              | 2                                              | 11                   | 12              | 1  | 23                   |    |                      |    |
| 48       | Roughers, 9-inch: 7 plants.....     | 1907  | 58                   | 56.3                              | .564                            | 29.94                              | 22                                             | 8                    |                 |    | 28                   |    |                      |    |
| 49       |                                     | 1908  | 54                   | 60.4                              | .392                            | 23.30                              | 12                                             | 8                    |                 |    | 21                   | 4  |                      |    |
| 50       |                                     | 1909  | 54                   | 56.5                              | .422                            | 23.20                              | 21                                             | 8                    |                 |    | 21                   | 4  |                      |    |
| 51       |                                     | 1910  | 58                   | 56.9                              | .454                            | 25.14                              | 22                                             | 8                    |                 |    | 24                   | 4  |                      |    |

AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  | 2                                | 8                          | 1           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 6                          | 2           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 5                          | 3           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  | 10                         | 4           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 2                                | 1                                | 17                         | 5           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 15                         | 6           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  |                                  | 3                                | 22                         | 7           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                |                                  | 2                                |                                  | 21                         | 8           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 2                          | 9           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  |                                  |                                  | 3                          | 10          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  |                                  | 3                          | 11          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                          | 12          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  | 2                                |                                  | 5                          | 13          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  | 6                          | 14          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 3                                | 5                          | 15          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  | 3                                | 8                          | 16          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 11                         | 17          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 11                         | 18          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 11                         | 19          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 12                         | 20          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 10                         | 21          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 5                                | 13                               | 47                         | 22          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 1                                | 5                                | 14                               | 40                         | 23          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 5                                | 5                                | 7                                | 45                         | 24          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 4                                | 2                                | 13                               | 47                         | 25          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 8                                | 8                                | 22                               | 83                         | 26          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 9                                | 12                               | 21                               | 73                         | 27          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 11                               | 12                               | 21                               | 75                         | 28          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                |                                  | 5                                | 16                               | 21                               | 80                         | 29          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                |                                  | 2                                | 5                                | 16                               | 23                               | 81                         | 30          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 3                                | 8                                | 11                               | 105                        | 31          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 6                                | 11                               | 13                               | 140                        | 32          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 8                                | 10                               | 24                               | 120                        | 33          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 5                                | 11                               | 10                               | 31                               | 159                        | 34          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 10                               | 12                               | 27                               | 164                        | 35          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 7                                | 22                               | 8                                | 7                                |                                  |                            | 36          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 14                               | 3                                | 27                               |                                  |                                  |                            | 37          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 28                               | 9                                | 1                                |                                  |                            | 38          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 9                                | 16                               | 7                                | 9                                |                                  |                            | 39          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 6                                | 27                               | 26                               | 10                               | 15                               |                                  |                            | 40          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 6                                | 15                               | 43                               | 13                               | 4                                |                                  |                            | 41          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 6                                | 28                               | 23                               | 21                               | 1                                |                                  |                            | 42          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 7                                | 12                               | 24                               | 14                               | 19                               | 1                          | 43          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 5                                | 7                                | 8                                | 8                                | 1                          | 44          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 5                                | 8                                | 9                                | 8                                |                            | 45          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 6                                | 18                               | 16                               | 8                                | 1                          | 46          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 21                               | 15                               | 5                                | 4                                |                            | 47          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 13                               | 12                               | 8                                | 22                         | 48          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 6                                |                                  | 20                               | 20                               | 8                                |                            | 49          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 12                               | 16                               | 17                               |                            | 50          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 51          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 12                               |                                  | 4                                | 20                               | 16                               | 6                                |                            |             |

TABLE O.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1907 TO 1915—

| Line No. | Occupation, and number of plants.                         | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|-----------------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                                           |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Roughers, 9-inch—Con.<br>12 plants. ....                  | 1910  | 88                   | 58.2                              | \$0.449                         | \$25.69                            | 28                                             | 10                   |                 | 10 | 30                   | 10 |                      |    |
| 2        |                                                           | 1911  | 83                   | 57.4                              | .414                            | 23.87                              | 27                                             | 17                   |                 |    | 30                   | 9  |                      |    |
| 3        |                                                           | 1912  | 84                   | 57.2                              | .429                            | 24.17                              | 27                                             | 20                   |                 |    | 28                   | 9  |                      |    |
| 4        | 11 plants. ....                                           | 1912  | 82                   | 57.0                              | .433                            | 24.35                              | 27                                             | 17                   | 6               |    | 23                   | 9  |                      |    |
| 5        |                                                           | 1913  | 83                   | 56.6                              | .484                            | 27.20                              | 22                                             | 23                   | 6               |    | 29                   | 3  |                      |    |
| 6        | 14 plants. ....                                           | 1913  | 43                   | 60.2                              | .454                            | 27.21                              |                                                | 16                   | 7               |    | 18                   | 2  |                      |    |
| 7        |                                                           | 1914  | 42                   | 60.4                              | .419                            | 25.10                              |                                                | 15                   | 7               |    | 18                   | 2  |                      |    |
| 8        | 15 plants. ....                                           | 1914  | 48                   | 60.0                              | .420                            | 25.11                              |                                                | 15                   | 11              |    | 22                   |    |                      |    |
| 9        |                                                           | 1915  | 47                   | 59.5                              | .435                            | 25.92                              | 3                                              | 12                   | 11              |    | 21                   |    |                      |    |
| 10       | Roughers, 10-inch:<br>5 plants. ....                      | 1907  | 33                   | 64.4                              | .441                            | 29.11                              | 3                                              |                      | 8               |    | 8                    | 14 |                      |    |
| 11       |                                                           | 1908  | 37                   | 65.2                              | .323                            | 21.09                              | 3                                              |                      | 8               |    | 8                    | 18 |                      |    |
| 12       |                                                           | 1909  | 37                   | 65.0                              | .370                            | 23.73                              | 3                                              |                      | 8               |    | 26                   |    |                      |    |
| 13       |                                                           | 1910  | 38                   | 64.8                              | .395                            | 25.40                              | 3                                              |                      | 9               |    | 26                   |    |                      |    |
| 14       | 7 plants. ....                                            | 1910  | 51                   | 64.8                              | .412                            | 26.45                              | 3                                              | 8                    |                 |    | 34                   | 6  |                      |    |
| 15       |                                                           | 1911  | 51                   | 63.3                              | .366                            | 22.72                              | 3                                              | 12                   |                 |    | 30                   | 6  |                      |    |
| 16       |                                                           | 1912  | 51                   | 63.3                              | .399                            | 24.69                              | 3                                              | 12                   |                 |    | 30                   | 6  |                      |    |
| 17       | 7 plants. ....                                            | 1912  | 53                   | 61.7                              | .374                            | 22.57                              | 3                                              | 8                    | 16              |    | 26                   |    |                      |    |
| 18       |                                                           | 1913  | 53                   | 61.5                              | .413                            | 25.17                              | 3                                              | 8                    | 16              |    | 26                   |    |                      |    |
| 19       | 14 plants. ....                                           | 1913  | 57                   | 55.4                              | .459                            | 25.17                              | 9                                              | 18                   | 18              |    | 12                   |    |                      |    |
| 20       |                                                           | 1914  | 55                   | 55.1                              | .425                            | 22.94                              | 9                                              | 18                   | 16              |    | 12                   |    |                      |    |
| 21       | 21 plants. ....                                           | 1914  | 82                   | 57.4                              | .435                            | 24.76                              | 9                                              | 23                   | 18              |    | 32                   |    |                      |    |
| 22       |                                                           | 1915  | 81                   | 57.2                              | .464                            | 26.47                              | 15                                             | 16                   | 20              |    | 30                   |    |                      |    |
| 23       | Roughers, 12-inch:<br>8 plants. ....                      | 1907  | 62                   | 64.5                              | .416                            | 27.10                              | 9                                              |                      | 3               |    | 26                   | 24 |                      |    |
| 24       |                                                           | 1908  | 55                   | 64.1                              | .301                            | 19.45                              | 9                                              | 6                    |                 |    | 14                   | 26 |                      |    |
| 25       |                                                           | 1909  | 54                   | 67.7                              | .351                            | 23.77                              |                                                | 6                    |                 |    | 38                   | 10 |                      |    |
| 26       |                                                           | 1910  | 58                   | 67.5                              | .400                            | 27.06                              |                                                | 6                    |                 |    | 40                   | 12 |                      |    |
| 27       | 14 plants. ....                                           | 1910  | 89                   | 64.6                              | .397                            | 25.80                              | 6                                              | 16                   |                 | 4  | 45                   | 18 |                      |    |
| 28       |                                                           | 1911  | 81                   | 65.3                              | .361                            | 23.35                              | 6                                              | 10                   | 3               |    | 45                   | 17 |                      |    |
| 29       |                                                           | 1912  | 85                   | 64.4                              | .391                            | 25.24                              | 6                                              | 16                   |                 |    | 47                   | 16 |                      |    |
| 30       | 13 plants. ....                                           | 1912  | 81                   | 64.4                              | .401                            | 25.84                              | 6                                              | 15                   | 2               |    | 42                   | 16 |                      |    |
| 31       |                                                           | 1913  | 84                   | 63.8                              | .447                            | 28.44                              |                                                | 24                   | 2               |    | 48                   | 10 |                      |    |
| 32       | 20 plants. ....                                           | 1913  | 74                   | 61.7                              | .461                            | 28.47                              | 6                                              | 18                   | 5               |    | 41                   | 4  |                      |    |
| 33       |                                                           | 1914  | 71                   | 61.7                              | .414                            | 25.28                              | 6                                              | 18                   | 5               |    | 36                   | 6  |                      |    |
| 34       | 25 plants. ....                                           | 1914  | 86                   | 60.6                              | .424                            | 25.39                              | 6                                              | 28                   | 9               |    | 37                   | 6  |                      |    |
| 35       |                                                           | 1915  | 88                   | 60.5                              | .408                            | 24.55                              | 9                                              | 25                   | 9               |    | 31                   | 14 |                      |    |
| 36       | Roughers, 13-inch, 14-inch, and 15-inch:<br>1 plant. .... | 1907  | 12                   | 60.0                              | .289                            | 17.34                              |                                                |                      |                 | 12 |                      |    |                      |    |
| 37       |                                                           | 1908  | 12                   | 60.0                              | .250                            | 15.00                              |                                                |                      |                 | 12 |                      |    |                      |    |
| 38       |                                                           | 1909  | 12                   | 60.0                              | .262                            | 15.72                              |                                                |                      |                 | 12 |                      |    |                      |    |
| 39       |                                                           | 1910  | 12                   | 60.0                              | .289                            | 17.34                              |                                                |                      |                 | 12 |                      |    |                      |    |
| 40       | 5 plants. ....                                            | 1910  | 48                   | 61.5                              | .379                            | 22.89                              | 12                                             |                      |                 | 12 | 18                   | 6  |                      |    |
| 41       |                                                           | 1911  | 46                   | 61.2                              | .338                            | 20.51                              | 12                                             |                      |                 | 12 | 16                   | 6  |                      |    |
| 42       |                                                           | 1912  | 47                   | 61.4                              | .364                            | 22.23                              | 12                                             |                      |                 | 12 | 17                   | 6  |                      |    |
| 43       |                                                           | 1913  | 41                   | 61.8                              | .386                            | 23.30                              |                                                | 12                   |                 | 6  | 21                   | 2  |                      |    |
| 44       | 5 plants. ....                                            | 1913  | 14                   | 57.7                              | .418                            | 23.61                              | 6                                              |                      |                 | 2  | 4                    | 2  |                      |    |
| 45       |                                                           | 1914  | 14                   | 57.7                              | .428                            | 24.53                              | 6                                              |                      |                 | 2  | 4                    | 2  |                      |    |
| 46       | 7 plants. ....                                            | 1914  | 20                   | 58.4                              | .473                            | 27.56                              | 6                                              |                      | 2               | 2  | 8                    | 2  |                      |    |
| 47       |                                                           | 1915  | 22                   | 57.7                              | .454                            | 26.29                              | 6                                              | 2                    | 4               |    | 8                    | 2  |                      |    |
| 48       | Roughers, 16-inch:<br>5 plants. ....                      | 1907  | 36                   | 63.0                              | .349                            | 22.20                              |                                                |                      | 8               |    | 28                   |    |                      |    |
| 49       |                                                           | 1908  | 32                   | 63.1                              | .349                            | 22.23                              |                                                |                      | 8               |    | 24                   |    |                      |    |
| 50       |                                                           | 1909  | 34                   | 63.4                              | .347                            | 22.22                              |                                                |                      | 8               |    | 26                   |    |                      |    |
| 51       |                                                           | 1910  | 42                   | 62.2                              | .390                            | 24.65                              |                                                |                      | 14              |    | 28                   |    |                      |    |
| 52       |                                                           | 1911  | 34                   | 63.4                              | .415                            | 26.55                              |                                                |                      | 8               |    | 26                   |    |                      |    |

AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No.                |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|----------------------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |                            |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 16<br>14<br>17                   | 6<br>29<br>14                    | 38<br>24<br>22                   | 22<br>12<br>23                   | 6<br>4<br>8                      |                            | 1<br>2<br>3                |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 15<br>9                          | 14<br>11                         | 22<br>25                         | 23<br>22                         | 8<br>8                           | 8                          | 4<br>5                     |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 5                                | 8<br>2                           | 7<br>15                          | 11<br>6                          | 9<br>10                          | 4<br>4                           | 4                          | 6<br>7                     |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 5<br>2                           | 6<br>4                           | 13<br>19                         | 6<br>2                           | 14<br>14                         | 4<br>6                           |                            | 8<br>9                     |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 8                                |                                  | 3<br>12                          | 4<br>14                          | 18<br>7                          |                                  |                            | 10<br>11<br>12<br>13       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 6<br>9                           | 15<br>12                         | 8<br>6                           | 4<br>11                          |                                  |                            |                            |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 28<br>29<br>20                   | 12<br>17<br>18                   | 11<br>2<br>7                     |                                  |                            | 14<br>15<br>16             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 14                               | 20<br>28                         | 12<br>20                         | 7<br>5                           |                                  |                            | 17<br>18                   |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1<br>2                           | 1<br>3                           | 20<br>21                         | 13<br>11                         | 16<br>16                         | 6<br>2                           |                            | 19<br>20                   |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 8<br>3                           | 23<br>20                         | 15<br>26                         | 32<br>20                         | 2<br>12                          |                            | 21<br>22                   |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 6<br>18<br>9                     | 24<br>22<br>39<br>34             | 28<br>4<br>6<br>24               | 4                                |                                  |                            | 23<br>24<br>25<br>26       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 10<br>22<br>7                    | 39<br>42<br>46                   | 37<br>10<br>6                    | 3<br>7<br>22                     |                                  |                            | 27<br>28<br>29             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 7<br>4                           | 46<br>16                         | 6<br>49                          | 22<br>13                         |                                  |                            | 30<br>31                   |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2<br>8                           | 10<br>30                         | 40<br>25                         | 20<br>2                          | 2<br>4                           | 2                          | 32<br>33                   |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 8<br>6                           | 33<br>27                         | 31<br>40                         | 6<br>9                           | 6<br>2                           | 2                          | 34<br>35                   |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 12<br>12<br>12<br>12             |                                  |                                  |                                  |                                  |                            | 36<br>37<br>38<br>39       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 12<br>14<br>12<br>7              | 22<br>25<br>11<br>18             | 11<br>7<br>24<br>11              | 3<br>5                           |                                  |                            | 40<br>41<br>42<br>43       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 5<br>6                           | 9<br>6                           |                                  |                                  |                            | 44<br>45                   |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 6<br>6                           | 8<br>12                          | 2<br>4                           | 4                                |                            | 46<br>47                   |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 8<br>8<br>8<br>14<br>8           | 24<br>10<br>12<br>14<br>6<br>4   | 4<br>14<br>14<br>14<br>10        |                                  |                                  |                            | 48<br>49<br>50<br>51<br>52 |

TABLE O.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1907 TO 1915—

| Line No. | Occupation, and number of plants.      | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |       |                      |       |                      |       |
|----------|----------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-------|----------------------|-------|----------------------|-------|
|          |                                        |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60    | Over 60 and under 72 | 72    | Over 72 and under 84 | 84    |
| 1        | Roughers, 16-inch—<br>6 plants.....    | 1911  | 42                   | 62.3                              | \$0.415                         | \$26.05                            | .....                                          | 4                    | 8               | ..... | 30                   | ..... | .....                | ..... |
| 2        |                                        | 1912  | 40                   | 61.8                              | .381                            | 23.63                              | .....                                          | 4                    | 8               | ..... | 28                   | ..... | .....                | ..... |
| 3        | 5 plants.....                          | 1912  | 32                   | 61.0                              | .384                            | 23.50                              | .....                                          | 4                    | 8               | ..... | 20                   | ..... | .....                | ..... |
| 4        |                                        | 1913  | 34                   | 61.4                              | .435                            | 26.85                              | .....                                          | 4                    | 8               | ..... | 22                   | ..... | .....                | ..... |
| 5        | 14 plants.....                         | 1913  | 51                   | 58.9                              | .429                            | 25.24                              | 10                                             | 6                    | 10              | ..... | 21                   | 4     | .....                | ..... |
| 6        |                                        | 1914  | 44                   | 59.4                              | .430                            | 25.07                              | 8                                              | 5                    | 8               | ..... | 19                   | 4     | .....                | ..... |
| 7        | 19 plants.....                         | 1914  | 61                   | 60.5                              | .473                            | 28.37                              | 8                                              | 7                    | 7               | ..... | 35                   | 4     | .....                | ..... |
| 8        |                                        | 1915  | 63                   | 60.4                              | .430                            | 26.14                              | 8                                              | 7                    | 9               | ..... | 35                   | 4     | .....                | ..... |
| 9        | Roughers, 18-inch:<br>2 plants.....    | 1907  | 7                    | 62.0                              | .384                            | 23.68                              | .....                                          | .....                | 1               | ..... | 6                    | ..... | .....                | ..... |
| 10       |                                        | 1908  | 8                    | 60.5                              | .348                            | 20.83                              | .....                                          | 2                    | .....           | ..... | 6                    | ..... | .....                | ..... |
| 11       |                                        | 1909  | 8                    | 60.5                              | .380                            | 22.73                              | .....                                          | 2                    | .....           | ..... | 6                    | ..... | .....                | ..... |
| 12       |                                        | 1910  | 8                    | 60.5                              | .523                            | 31.55                              | .....                                          | 2                    | .....           | ..... | 6                    | ..... | .....                | ..... |
| 13       | 5 plants.....                          | 1910  | 23                   | 59.4                              | .414                            | 24.92                              | .....                                          | 8                    | .....           | 6     | 9                    | ..... | .....                | ..... |
| 14       |                                        | 1911  | 19                   | 60.3                              | .444                            | 26.73                              | .....                                          | 4                    | 3               | ..... | 12                   | ..... | .....                | ..... |
| 15       |                                        | 1912  | 22                   | 58.9                              | .465                            | 27.34                              | .....                                          | 10                   | .....           | ..... | 12                   | ..... | .....                | ..... |
| 16       | 7 plants.....                          | 1912  | 31                   | 58.9                              | .494                            | 29.04                              | .....                                          | 11                   | 8               | ..... | 12                   | ..... | .....                | ..... |
| 17       |                                        | 1913  | 33                   | 58.6                              | .500                            | 29.42                              | .....                                          | 13                   | 8               | ..... | 12                   | ..... | .....                | ..... |
| 18       | 13 plants.....                         | 1913  | 34                   | 55.5                              | .504                            | 27.85                              | 3                                              | 17                   | 6               | ..... | 8                    | ..... | .....                | ..... |
| 19       |                                        | 1914  | 32                   | 55.5                              | .460                            | 25.40                              | 3                                              | 15                   | 6               | ..... | 8                    | ..... | .....                | ..... |
| 20       | 14 plants.....                         | 1914  | 37                   | 55.2                              | .451                            | 24.80                              | 3                                              | 18                   | 8               | ..... | 8                    | ..... | .....                | ..... |
| 21       |                                        | 1915  | 36                   | 54.9                              | .480                            | 26.43                              | 9                                              | 11                   | 8               | ..... | 8                    | ..... | .....                | ..... |
| 22       | Roughers, all sizes:<br>15 plants..... | 1907  | 252                  | 61.5                              | .434                            | 26.28                              | 34                                             | 23                   | 28              | 12    | 111                  | 44    | .....                | ..... |
| 23       |                                        | 1908  | 242                  | 62.5                              | .343                            | 21.35                              | 24                                             | 31                   | 24              | 12    | 97                   | 54    | .....                | ..... |
| 24       |                                        | 1909  | 243                  | 62.4                              | .368                            | 22.72                              | 24                                             | 31                   | 24              | 12    | 138                  | 14    | .....                | ..... |
| 25       |                                        | 1910  | 257                  | 62.3                              | .407                            | 25.21                              | 25                                             | 31                   | 28              | 12    | 145                  | 16    | .....                | ..... |
| 26       | 25 plants.....                         | 1910  | 425                  | 61.0                              | .402                            | 24.51                              | 73                                             | 61                   | 22              | 32    | 197                  | 40    | .....                | ..... |
| 27       |                                        | 1911  | 395                  | 60.6                              | .376                            | 22.65                              | 72                                             | 68                   | 25              | 12    | 180                  | 38    | .....                | ..... |
| 28       | 26 plants.....                         | 1911  | 403                  | 60.5                              | .377                            | 22.68                              | 72                                             | 72                   | 25              | 12    | 184                  | 38    | .....                | ..... |
| 29       |                                        | 1912  | 408                  | 60.2                              | .389                            | 23.36                              | 72                                             | 85                   | 19              | 12    | 183                  | 37    | .....                | ..... |
| 30       | 26 plants.....                         | 1912  | 405                  | 59.9                              | .393                            | 23.42                              | 72                                             | 78                   | 51              | 12    | 161                  | 31    | .....                | ..... |
| 31       |                                        | 1913  | 407                  | 59.8                              | .436                            | 26.00                              | 25                                             | 131                  | 57              | 6     | 173                  | 15    | .....                | ..... |
| 32       | 44 plants.....                         | 1913  | 305                  | 58.5                              | .452                            | 26.32                              | 8                                              | 99                   | 99              | ..... | 97                   | 2     | .....                | ..... |
| 33       |                                        | 1914  | 290                  | 58.4                              | .423                            | 24.42                              | 16                                             | 68                   | 113             | ..... | 91                   | 2     | .....                | ..... |
| 34       | 57 plants.....                         | 1914  | 385                  | 58.8                              | .436                            | 25.41                              | 8                                              | 47                   | 205             | ..... | 125                  | ..... | .....                | ..... |
| 35       |                                        | 1915  | 386                  | 58.9                              | .438                            | 25.76                              | 8                                              | 34                   | 205             | ..... | 139                  | ..... | .....                | ..... |
| 36       | Catchers, 8-inch:<br>3 plants.....     | 1907  | 18                   | 56.6                              | .362                            | 20.48                              | .....                                          | 8                    | 10              | ..... | .....                | ..... | .....                | ..... |
| 37       |                                        | 1908  | 18                   | 56.6                              | .350                            | 19.66                              | .....                                          | 8                    | 10              | ..... | .....                | ..... | .....                | ..... |
| 38       |                                        | 1909  | 18                   | 56.6                              | .335                            | 18.90                              | .....                                          | 8                    | 10              | ..... | .....                | ..... | .....                | ..... |
| 39       |                                        | 1910  | 17                   | 56.4                              | .371                            | 20.97                              | .....                                          | 8                    | 9               | ..... | .....                | ..... | .....                | ..... |
| 40       | 6 plants.....                          | 1910  | 26                   | 54.3                              | .351                            | 19.14                              | 6                                              | 10                   | 10              | ..... | .....                | ..... | .....                | ..... |
| 41       |                                        | 1911  | 27                   | 54.1                              | .319                            | 17.32                              | 6                                              | 10                   | 11              | ..... | .....                | ..... | .....                | ..... |
| 42       |                                        | 1912  | 25                   | 54.1                              | .340                            | 18.48                              | 6                                              | 8                    | 11              | ..... | .....                | ..... | .....                | ..... |
| 43       |                                        | 1913  | 25                   | 54.3                              | .400                            | 21.98                              | .....                                          | 16                   | 9               | ..... | .....                | ..... | .....                | ..... |
| 44       | 10 plants.....                         | 1913  | 25                   | 56.7                              | .427                            | 24.06                              | 2                                              | 6                    | 15              | ..... | 2                    | ..... | .....                | ..... |
| 45       |                                        | 1914  | 25                   | 57.6                              | .387                            | 21.99                              | 5                                              | 3                    | 7               | ..... | 10                   | ..... | .....                | ..... |
| 46       | 15 plants.....                         | 1914  | 38                   | 58.4                              | .394                            | 22.70                              | 5                                              | 9                    | 6               | ..... | 18                   | ..... | .....                | ..... |
| 47       |                                        | 1915  | 38                   | 60.3                              | .427                            | 25.56                              | 2                                              | 8                    | 6               | ..... | 22                   | ..... | .....                | ..... |
| 48       | Catchers, 9-inch:<br>2 plants.....     | 1907  | 12                   | 58.0                              | .474                            | 27.30                              | .....                                          | 8                    | .....           | ..... | 4                    | ..... | .....                | ..... |
| 49       |                                        | 1908  | 12                   | 58.0                              | .455                            | 25.94                              | .....                                          | 8                    | .....           | ..... | 4                    | ..... | .....                | ..... |
| 50       |                                        | 1909  | 12                   | 58.0                              | .495                            | 28.68                              | .....                                          | 8                    | .....           | ..... | 4                    | ..... | .....                | ..... |
| 51       |                                        | 1910  | 12                   | 58.0                              | .526                            | 30.37                              | .....                                          | 8                    | .....           | ..... | 4                    | ..... | .....                | ..... |

AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 8                                | 4                                | 2                                | 16                               | 12                               |                                  |                            | 1           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 14                               |                                  | 8                                | 12                               | 2                                | 4                                |                            | 2           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 14                               |                                  |                                  | 12                               | 2                                | 4                                |                            | 3           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 8                                |                                  | 14                               | 12                               |                                  |                            | 4           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 17                               | 16                               | 14                               |                                  |                            | 5           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 12                               | 17                               | 10                               | 1                                |                            | 6           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 13                               | 23                               | 15                               | 3                                |                            | 7           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 8                                | 29                               | 17                               | 4                                | 3                                | 2                          | 8           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 6                                |                                  | 1                                |                                  |                            | 9           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 2                                |                                  |                                  |                            | 10          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 6                                |                                  | 1                                |                                  |                            | 11          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 8                                |                                  |                            | 12          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 6                                |                                  |                                  | 6                                | 11                               |                                  |                            | 13          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 6                                |                                  | 11                               |                                  |                            | 14          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  | 15                               | 5                                |                                  |                            | 15          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  | 16                               | 13                               |                                  |                            | 16          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                |                                  | 12                               | 15                               | 2                                |                            | 17          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 3                                | 12                               | 10                               | 7                                |                            | 18          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 9                                | 4                                | 16                               | 1                                |                            | 19          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 12                               | 6                                | 16                               | 1                                |                            | 20          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 10                               | 7                                | 7                                | 8                                | 1                          | 21          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 16                               | 28                               | 92                               | 56                               | 38                               |                                  | 22                         | 22          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 33                               | 50                               | 76                               | 75                               | 8                                |                                  |                            | 23          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 8                                | 48                               | 111                              | 53                               | 23                               |                                  |                            | 24          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 14                               | 42                               | 72                               | 71                               | 52                               | 6                                |                            | 25          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 26                               | 65                               | 127                              | 128                              | 73                               | 6                                |                            | 26          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 14                               | 74                               | 174                              | 81                               | 48                               | 4                                |                            | 27          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 14                               | 74                               | 176                              | 87                               | 48                               | 4                                |                            | 28          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 24                               | 72                               | 122                              | 118                              | 60                               | 12                               |                            | 29          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 20                               | 78                               | 114                              | 113                              | 68                               | 12                               |                            | 30          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                | 7                                | 44                               | 97                               | 145                              | 91                               | 13                               | 8                          | 31          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 4                                | 22                               | 69                               | 109                              | 77                               | 20                               | 4                          | 32          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 9                                | 24                               | 101                              | 78                               | 64                               | 12                               | 2                          | 33          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 9                                | 34                               | 118                              | 105                              | 93                               | 21                               | 5                          | 34          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 6                                | 29                               | 132                              | 118                              | 63                               | 35                               | 3                          | 35          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                |                                  | 12                               | 4                                |                                  |                                  |                            | 36          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 6                                | 8                                |                                  |                                  |                            | 37          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 16                               |                                  |                                  |                                  |                            | 38          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                |                                  | 14                               | 2                                |                                  |                                  |                            | 39          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 3                                | 3                                | 17                               | 3                                |                                  |                                  |                            | 40          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                | 2                                |                                  | 23                               |                                  |                                  |                                  |                            | 41          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 1                                |                                  | 1                                | 4                                | 12                               | 7                                |                                  |                                  |                            | 42          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 1                                | 2                                | 2                                | 6                                | 10                               | 4                                |                                  |                            | 43          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 3                                | 4                                | 9                                | 7                                |                                  |                            | 44          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 4                                | 11                               | 4                                | 5                                |                                  |                            | 45          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 4                                | 18                               | 9                                | 5                                | 1                                |                            | 46          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 16                               | 15                               | 3                                | 2                                |                            | 47          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 8                                |                                  |                            | 48          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 8                                |                                  |                            | 49          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 8                                |                                  |                            | 50          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 8                                |                                  |                            | 51          |

TABLE O.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1907 TO 1915—

| Line No. | Occupation, and number of plants.        | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                          |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Catchers, 9-inch—Con.                    | 1910  | 17                   | 56.5                              | \$0.499                         | \$28.19                            | 3                                              | 8                    |                 | 2  | 4                    |    |                      |    |
| 2        | 4 plants.....                            | 1911  | 17                   | 56.8                              | .440                            | 24.76                              | 3                                              | 8                    |                 |    | 6                    |    |                      |    |
| 3        |                                          | 1912  | 15                   | 55.7                              | .508                            | 27.86                              | 3                                              | 8                    |                 |    | 4                    |    |                      |    |
| 4        | 3 plants.....                            | 1912  | 13                   | 54.3                              | .546                            | 29.55                              | 3                                              | 8                    |                 |    | 2                    |    |                      |    |
| 5        |                                          | 1913  | 13                   | 54.9                              | .619                            | 33.98                              |                                                | 11                   |                 |    | 2                    |    |                      |    |
| 6        | 14 plants.....                           | 1913  | 30                   | 59.1                              | .470                            | 27.74                              |                                                | 13                   | 5               |    | 11                   | 1  |                      |    |
| 7        |                                          | 1914  | 30                   | 59.1                              | .434                            | 25.54                              |                                                | 13                   | 5               |    | 11                   | 1  |                      |    |
| 8        | 15 plants.....                           | 1914  | 35                   | 59.2                              | .438                            | 25.97                              |                                                | 13                   | 7               |    | 15                   |    |                      |    |
| 9        |                                          | 1915  | 35                   | 58.9                              | .446                            | 26.37                              | 3                                              | 10                   | 7               |    | 15                   |    |                      |    |
| 10       | Catchers, 10-inch:                       |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 11       | 1 plant.....                             | 1907  | 10                   | 72.0                              | .352                            | 25.35                              |                                                |                      |                 |    |                      | 10 |                      |    |
| 12       |                                          | 1908  | 10                   | 72.0                              | .377                            | 27.14                              |                                                |                      |                 |    |                      | 10 |                      |    |
| 13       |                                          | 1909  | 10                   | 71.5                              | .379                            | 27.06                              |                                                |                      |                 |    | 10                   |    |                      |    |
| 14       |                                          | 1910  | 10                   | 71.5                              | .456                            | 32.63                              |                                                |                      |                 |    | 10                   |    |                      |    |
| 15       | 3 plants.....                            | 1910  | 16                   | 66.8                              | .383                            | 26.24                              |                                                | 4                    |                 |    | 10                   | 2  |                      |    |
| 16       |                                          | 1911  | 16                   | 65.9                              | .365                            | 24.46                              |                                                | 4                    |                 |    | 10                   | 2  |                      |    |
| 17       |                                          | 1912  | 16                   | 65.9                              | .419                            | 28.23                              |                                                | 4                    |                 |    | 10                   | 2  |                      |    |
| 18       | 2 plants.....                            | 1912  | 18                   | 66.4                              | .449                            | 30.49                              |                                                | 4                    |                 |    | 14                   |    |                      |    |
| 19       |                                          | 1913  | 18                   | 66.4                              | .484                            | 33.12                              |                                                | 4                    |                 |    | 14                   |    |                      |    |
| 20       | 13 plants.....                           | 1913  | 41                   | 55.7                              | .454                            | 24.98                              | 6                                              | 14                   | 13              |    | 8                    |    |                      |    |
| 21       |                                          | 1914  | 39                   | 55.2                              | .425                            | 23.03                              | 6                                              | 14                   | 11              |    | 8                    |    |                      |    |
| 22       | 20 plants.....                           | 1914  | 64                   | 57.7                              | .438                            | 25.11                              | 6                                              | 19                   | 14              |    | 25                   |    |                      |    |
| 23       | Catchers, 12-inch:                       | 1915  | 62                   | 57.4                              | .465                            | 26.72                              | 12                                             | 13                   | 14              |    | 23                   |    |                      |    |
| 24       | 5 plants.....                            | 1907  | 16                   | 65.6                              | .446                            | 29.52                              |                                                | 2                    |                 |    | 10                   | 4  |                      |    |
| 25       |                                          | 1908  | 17                   | 64.1                              | .317                            | 20.42                              |                                                | 4                    |                 |    | 9                    | 4  |                      |    |
| 26       |                                          | 1909  | 17                   | 63.9                              | .349                            | 22.61                              |                                                | 4                    |                 |    | 13                   |    |                      |    |
| 27       |                                          | 1910  | 18                   | 63.7                              | .411                            | 26.37                              |                                                | 4                    |                 |    | 14                   |    |                      |    |
| 28       | 10 plants.....                           | 1910  | 28                   | 62.5                              | .403                            | 25.40                              | 3                                              | 4                    |                 | 2  | 17                   | 2  |                      |    |
| 29       |                                          | 1911  | 27                   | 62.1                              | .368                            | 22.90                              | 3                                              | 5                    | 1               |    | 16                   | 2  |                      |    |
| 30       |                                          | 1912  | 29                   | 61.7                              | .348                            | 21.52                              | 3                                              | 7                    |                 |    | 17                   | 2  |                      |    |
| 31       | 9 plants.....                            | 1912  | 25                   | 61.1                              | .372                            | 22.88                              | 3                                              | 6                    | 2               |    | 12                   | 2  |                      |    |
| 32       |                                          | 1913  | 25                   | 61.0                              | .416                            | 25.26                              |                                                | 9                    | 2               |    | 14                   |    |                      |    |
| 33       | 19 plants.....                           | 1913  | 48                   | 62.0                              | .449                            | 27.74                              | 4                                              | 11                   | 3               |    | 28                   | 2  |                      |    |
| 34       |                                          | 1914  | 47                   | 61.8                              | .390                            | 23.87                              | 4                                              | 11                   | 4               |    | 25                   | 3  |                      |    |
| 35       | 24 plants.....                           | 1914  | 60                   | 60.4                              | .411                            | 24.47                              | 4                                              | 19                   | 8               |    | 26                   | 3  |                      |    |
| 36       | Catchers, 13-inch, 14-inch, and 15-inch: | 1915  | 62                   | 60.9                              | .397                            | 24.01                              | 7                                              | 14                   | 8               |    | 25                   | 8  |                      |    |
| 37       | 3 plants.....                            | 1910  | 7                    | 61.7                              | .458                            | 27.63                              | 3                                              |                      |                 |    |                      | 4  |                      |    |
| 38       |                                          | 1911  | 7                    | 61.7                              | .392                            | 23.92                              | 3                                              |                      |                 |    |                      | 4  |                      |    |
| 39       |                                          | 1912  | 7                    | 61.7                              | .407                            | 24.70                              | 3                                              |                      |                 |    |                      | 4  |                      |    |
| 40       |                                          | 1913  | 7                    | 61.1                              | .461                            | 27.58                              |                                                | 3                    |                 |    | 2                    | 2  |                      |    |
| 41       | 5 plants.....                            | 1913  | 14                   | 57.7                              | .411                            | 23.14                              | 6                                              |                      |                 | 2  | 4                    | 2  |                      |    |
| 42       |                                          | 1914  | 14                   | 57.7                              | .417                            | 23.09                              | 6                                              |                      |                 | 2  | 4                    | 2  |                      |    |
| 43       | 7 plants.....                            | 1914  | 18                   | 58.1                              | .444                            | 25.56                              | 6                                              |                      | 2               | 2  | 6                    | 2  |                      |    |
| 44       | Catchers, 16-inch:                       | 1915  | 20                   | 57.3                              | .438                            | 25.10                              | 6                                              | 2                    | 4               |    | 6                    | 2  |                      |    |
| 45       | 4 plants.....                            | 1907  | 10                   | 64.5                              | .636                            | 41.02                              |                                                |                      |                 | 1  | 9                    |    |                      |    |
| 46       |                                          | 1908  | 9                    | 65.0                              | .499                            | 32.46                              |                                                |                      |                 |    | 9                    |    |                      |    |
| 47       |                                          | 1909  | 9                    | 65.0                              | .552                            | 36.02                              |                                                |                      |                 |    | 9                    |    |                      |    |
| 48       |                                          | 1910  | 12                   | 64.6                              | .547                            | 35.32                              |                                                |                      |                 |    | 12                   |    |                      |    |
| 49       |                                          | 1911  | 9                    | 65.0                              | .664                            | 43.23                              |                                                |                      |                 |    | 9                    |    |                      |    |
| 50       |                                          | 1912  | 9                    | 64.5                              | .511                            | 33.00                              |                                                |                      |                 |    | 9                    |    |                      |    |
| 51       | 3 plants.....                            | 1912  | 7                    | 64.4                              | .418                            | 26.90                              |                                                |                      |                 |    | 7                    |    |                      |    |
|          |                                          | 1913  | 8                    | 64.4                              | .499                            | 32.12                              |                                                |                      |                 |    | 8                    |    |                      |    |



AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|-------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>ts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 1           |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 7                                | 9                                | 8                                |                                  |                            | 2           |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 3                                |                                  |                                  | 8                                |                            | 3           |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 3                                |                                  |                                  |                                  | 8                                |                            | 4           |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 3                                |                                  |                                  | 8                          | 5           |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 5                                | 2                                | 8                                | 5                                | 4                                | 4                          | 6           |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  | 5                                | 2                                | 7                                | 4                                | 8                                | 4                                |                            | 7           |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  | 5                                | 4                                | 6                                | 4                                | 12                               | 4                                |                            | 8           |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  | 3                                | 3                                | 11                               | 1                                | 13                               | 4                                |                            | 9           |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 9                                | 1                                |                                  |                                  |                            | 10          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 7                                | 3                                |                                  |                                  |                            | 11          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 7                                | 3                                |                                  |                                  |                            | 12          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 10                               |                                  |                                  |                            | 13          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  | 4                                | 2                                |                                  |                                  |                                  |                                  |                            | 14          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  | 1                                | 1                                | 3                                | 3                                | 8                                |                                  |                                  |                            | 15          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 8                                |                                  | 2                                |                                  |                            | 16          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 12                               | 2                                |                                  |                            | 17          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 1                                | 3                                | 10                               | 1                                |                            | 18          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                | 16                               | 8                                | 11                               | 4                                |                            | 19          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 17                               | 9                                | 9                                | 9                                | 2                                |                            | 20          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 5                                | 20                               | 12                               | 24                               | 2                                |                            | 21          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 14                               | 20                               | 15                               | 10                               |                            | 22          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  | 4                                |                                  | 2                                | 1                                | 9                                |                                  |                            | 23          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 7                                |                                  |                                  |                                  | 1                                |                            | 24          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  | 4                                | 2                                | 8                                | 2                                |                                  |                                  | 1                          | 25          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                |                                  | 8                                | 2                                |                                  |                            | 26          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 9                                | 9                                | 4                                |                                  |                            | 27          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 4                                | 15                               | 5                                |                                  |                                  | 1                          | 28          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  | 4                                | 6                                | 12                               | 5                                | 2                                |                                  |                            | 29          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 12                               | 5                                | 2                                |                                  |                            | 30          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 8                                | 7                                | 6                                |                                  |                            | 31          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 9                                | 21                               | 15                               |                                  |                            | 32          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 7                                | 21                               | 13                               | 1                                | 2                                | 1                          | 33          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 7                                | 23                               | 18                               | 5                                | 4                                | 1                          | 34          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  | 4                                | 6                                | 22                               | 24                               | 4                                | 2                                |                            | 35          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 3                                |                                  |                            | 36          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 5                                | 2                                |                                  |                                  |                            | 37          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 3                                |                                  |                                  |                            | 38          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 3                                | 2                                |                                  |                            | 39          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 7                                | 7                                |                                  |                                  |                            | 40          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 8                                |                                  |                                  |                            | 41          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 10                               |                                  | 2                                |                            | 42          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 12                               | 2                                |                                  |                            | 43          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 2                                |                                  |                                  | 4                          | 44          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 3                                |                                  | 2                                |                                  | 2                          | 45          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                |                                  | 2                                |                                  | 3                          | 46          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 4                                | 4                                |                            | 47          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 2                                | 1                                | 2                          | 48          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 7                                |                                  |                                  | 2                          | 49          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 7                                |                                  |                                  |                                  |                            | 50          |
|                                               |                               |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 2                                |                                  |                                  |                            | 51          |

TABLE O.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1907 TO 1915—

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |       |                      |       |                      |       |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-------|----------------------|-------|----------------------|-------|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60    | Over 60 and under 72 | 72    | Over 72 and under 84 | 84    |
| 1        | Catchers, 16-inch—Con.            | 1913  | 36                   | 58.8                              | \$0.413                         | \$24.45                            | 7                                              | 5                    | 7               | ..... | 15                   | 2     | .....                | ..... |
| 2        | 14 plants.....                    | 1914  | 31                   | 59.5                              | .419                            | 24.66                              | 5                                              | 5                    | 5               | ..... | 14                   | 2     | .....                | ..... |
| 3        | 19 plants.....                    | 1914  | 46                   | 60.6                              | .464                            | 27.92                              | 5                                              | 7                    | 5               | ..... | 27                   | 2     | .....                | ..... |
| 4        | .....                             | 1915  | 48                   | 60.7                              | .422                            | 25.80                              | 5                                              | 6                    | 7               | ..... | 28                   | 2     | .....                | ..... |
| 5        | Catchers, 18-inch:                | 1907  | 3                    | 61.0                              | .423                            | 25.96                              | .....                                          | .....                | 1               | ..... | 2                    | ..... | .....                | ..... |
| 6        | 2 plants.....                     | 1908  | 4                    | 58.3                              | .314                            | 18.51                              | .....                                          | 2                    | .....           | ..... | 2                    | ..... | .....                | ..... |
| 7        | .....                             | 1909  | 4                    | 58.3                              | .346                            | 20.40                              | .....                                          | 2                    | .....           | ..... | 2                    | ..... | .....                | ..... |
| 8        | .....                             | 1910  | 4                    | 58.3                              | .466                            | 27.72                              | .....                                          | 2                    | .....           | ..... | 2                    | ..... | .....                | ..... |
| 9        | 5 plants.....                     | 1910  | 9                    | 58.6                              | .375                            | 22.36                              | .....                                          | 4                    | .....           | 2     | 3                    | ..... | .....                | ..... |
| 10       | .....                             | 1911  | 8                    | 59.0                              | .369                            | 21.99                              | .....                                          | 3                    | 1               | ..... | 4                    | ..... | .....                | ..... |
| 11       | .....                             | 1912  | 9                    | 58.0                              | .391                            | 22.87                              | .....                                          | 5                    | .....           | ..... | 4                    | ..... | .....                | ..... |
| 12       | 7 plants.....                     | 1912  | 13                   | 57.5                              | .467                            | 27.01                              | .....                                          | 7                    | 2               | ..... | 4                    | ..... | .....                | ..... |
| 13       | .....                             | 1913  | 14                   | 57.3                              | .463                            | 26.76                              | .....                                          | 8                    | 2               | ..... | 4                    | ..... | .....                | ..... |
| 14       | 13 plants.....                    | 1913  | 28                   | 54.3                              | .473                            | 25.62                              | 3                                              | 16                   | 5               | ..... | 4                    | ..... | .....                | ..... |
| 15       | .....                             | 1914  | 27                   | 54.3                              | .436                            | 23.58                              | 3                                              | 15                   | 5               | ..... | 4                    | ..... | .....                | ..... |
| 16       | 14 plants.....                    | 1914  | 32                   | 54.1                              | .429                            | 23.18                              | 3                                              | 18                   | 7               | ..... | 4                    | ..... | .....                | ..... |
| 17       | .....                             | 1915  | 31                   | 53.7                              | .434                            | 23.37                              | 9                                              | 11                   | 7               | ..... | 4                    | ..... | .....                | ..... |
| 18       | Catchers, all sizes:              | 1907  | 69                   | 62.5                              | .442                            | 27.68                              | .....                                          | 16                   | 13              | 1     | 25                   | 14    | .....                | ..... |
| 19       | 11 plants.....                    | 1908  | 70                   | 62.0                              | .381                            | 23.57                              | .....                                          | 22                   | 10              | ..... | 24                   | 14    | .....                | ..... |
| 20       | .....                             | 1909  | 70                   | 61.9                              | .400                            | 24.93                              | .....                                          | 22                   | 10              | ..... | 38                   | ..... | .....                | ..... |
| 21       | .....                             | 1910  | 73                   | 62.0                              | .452                            | 28.17                              | .....                                          | 22                   | 9               | ..... | 42                   | ..... | .....                | ..... |
| 22       | 20 plants.....                    | 1910  | 115                  | 60.2                              | .419                            | 25.45                              | 15                                             | 30                   | 10              | 6     | 46                   | 8     | .....                | ..... |
| 23       | .....                             | 1911  | 111                  | 59.9                              | .392                            | 23.70                              | 15                                             | 30                   | 13              | ..... | 45                   | 8     | .....                | ..... |
| 24       | .....                             | 1912  | 110                  | 59.7                              | .399                            | 23.92                              | 15                                             | 32                   | 11              | ..... | 44                   | 8     | .....                | ..... |
| 25       | 20 plants.....                    | 1912  | 108                  | 59.4                              | .415                            | 24.81                              | 15                                             | 33                   | 15              | ..... | 39                   | 6     | .....                | ..... |
| 26       | .....                             | 1913  | 110                  | 59.4                              | .462                            | 27.67                              | .....                                          | 51                   | 13              | ..... | 44                   | 2     | .....                | ..... |
| 27       | 44 plants.....                    | 1913  | 222                  | 58.1                              | .445                            | 25.73                              | 6                                              | 76                   | 64              | ..... | 74                   | 2     | .....                | ..... |
| 28       | .....                             | 1914  | 213                  | 58.2                              | .414                            | 23.80                              | 10                                             | 67                   | 49              | ..... | 85                   | 2     | .....                | ..... |
| 29       | 57 plants.....                    | 1914  | 293                  | 58.6                              | .430                            | 25.03                              | 6                                              | 82                   | 94              | ..... | 111                  | ..... | .....                | ..... |
| 30       | .....                             | 1915  | 296                  | 58.8                              | .432                            | 25.35                              | 6                                              | 71                   | 106             | ..... | 113                  | ..... | .....                | ..... |
| 31       | Stranders, 8-inch:                | 1907  | 56                   | 62.6                              | .305                            | 19.11                              | .....                                          | 6                    | 20              | ..... | 22                   | 8     | .....                | ..... |
| 32       | 7 plants.....                     | 1908  | 56                   | 62.8                              | .267                            | 16.77                              | .....                                          | 6                    | 20              | ..... | 22                   | 8     | .....                | ..... |
| 33       | .....                             | 1909  | 56                   | 62.7                              | .274                            | 17.22                              | .....                                          | 6                    | 20              | ..... | 30                   | ..... | .....                | ..... |
| 34       | .....                             | 1910  | 54                   | 62.8                              | .305                            | 19.11                              | .....                                          | 6                    | 18              | ..... | 30                   | ..... | .....                | ..... |
| 35       | 11 plants.....                    | 1910  | 75                   | 61.6                              | .275                            | 17.00                              | 6                                              | 8                    | 19              | ..... | 42                   | ..... | .....                | ..... |
| 36       | .....                             | 1911  | 73                   | 60.4                              | .249                            | 15.12                              | 6                                              | 12                   | 25              | ..... | 30                   | ..... | .....                | ..... |
| 37       | .....                             | 1912  | 73                   | 60.4                              | .244                            | 14.88                              | 6                                              | 14                   | 21              | ..... | 32                   | ..... | .....                | ..... |
| 38       | 11 plants.....                    | 1912  | 67                   | 60.6                              | .236                            | 14.53                              | 6                                              | 8                    | 27              | ..... | 26                   | ..... | .....                | ..... |
| 39       | .....                             | 1913  | 66                   | 60.7                              | .302                            | 18.54                              | .....                                          | 16                   | 24              | ..... | 26                   | ..... | .....                | ..... |
| 40       | 16 plants.....                    | 1913  | 117                  | 58.0                              | .299                            | 17.39                              | 4                                              | 48                   | 30              | 1     | 34                   | ..... | .....                | ..... |
| 41       | .....                             | 1914  | 116                  | 58.6                              | .266                            | 15.52                              | 4                                              | 47                   | 20              | 1     | 44                   | ..... | .....                | ..... |
| 42       | 21 plants.....                    | 1914  | 144                  | 58.9                              | .260                            | 15.24                              | 4                                              | 61                   | 17              | ..... | 62                   | ..... | .....                | ..... |
| 43       | .....                             | 1915  | 141                  | 59.0                              | .282                            | 16.63                              | 28                                             | 26                   | 17              | ..... | 62                   | 8     | .....                | ..... |
| 44       | Stranders, 9-inch:                | 1907  | 41                   | 56.2                              | .395                            | 20.75                              | 18                                             | .....                | .....           | ..... | 23                   | ..... | .....                | ..... |
| 45       | 6 plants.....                     | 1908  | 39                   | 56.4                              | .276                            | 15.10                              | 18                                             | .....                | .....           | ..... | 19                   | 2     | .....                | ..... |
| 46       | .....                             | 1909  | 39                   | 56.3                              | .287                            | 15.75                              | 18                                             | .....                | .....           | ..... | 19                   | 2     | .....                | ..... |
| 47       | .....                             | 1910  | 39                   | 56.3                              | .332                            | 18.28                              | 18                                             | .....                | .....           | ..... | 19                   | 2     | .....                | ..... |
| 48       | 10 plants.....                    | 1910  | 64                   | 59.1                              | .289                            | 16.64                              | 18                                             | 3                    | .....           | 10    | 25                   | 8     | .....                | ..... |
| 49       | .....                             | 1911  | 62                   | 58.6                              | .247                            | 14.39                              | 18                                             | 9                    | .....           | ..... | 27                   | 8     | .....                | ..... |
| 50       | .....                             | 1912  | 61                   | 58.0                              | .235                            | 13.44                              | 18                                             | 12                   | .....           | ..... | 23                   | 8     | .....                | ..... |
| 51       | 9 plants.....                     | 1912  | 57                   | 57.6                              | .241                            | 13.68                              | 18                                             | 9                    | 6               | ..... | 16                   | 8     | .....                | ..... |
| 52       | .....                             | 1913  | 57                   | 56.9                              | .293                            | 16.33                              | 18                                             | 9                    | 6               | ..... | 22                   | 2     | .....                | ..... |

AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 6                                | 11                               | 8                                | 10                               |                                  |                            | 1           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 2                                | 12                               | 8                                | 6                                | 2                                |                            | 2           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 2                                | 14                               | 11                               | 12                               | 4                                | 2                          | 3           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 6                                | 21                               | 10                               | 4                                | 5                                | 1                          | 4           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 1                                | 1                                | 1                                |                                  |                            | 5           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 2                                | 1                                |                                  |                                  |                            | 6           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  | 2                                |                                  |                            | 7           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                                  |                            | 8           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                |                                  |                                  | 4                                | 1                                | 2                                |                                  |                            | 9           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 1                                | 2                                | 2                                | 2                                | 1                                | 2                                |                                  |                            | 10          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 1                                | 1                                | 4                                | 4                                | 2                                | 2                                |                                  |                            | 11          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                |                                  | 4                                | 4                                | 2                                |                                  | 2                          | 12          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                | 2                                |                                  | 2                                | 4                                | 4                                |                                  | 2                          | 13          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 6                                | 7                                |                                  | 5                                |                            | 14          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 12                               | 2                                | 11                               | 1                                |                            | 15          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 15                               | 4                                | 11                               | 1                                |                            | 16          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 5                                | 12                               | 6                                | 3                                | 4                                | 1                          | 17          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 6                                |                                  | 28                               | 13                               | 18                               |                                  | 4                          | 18          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 13                               | 31                               | 11                               | 10                               | 1                                | 2                          | 19          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 4                                | 5                                | 37                               | 10                               | 10                               |                                  | 4                          | 20          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 4                                | 20                               | 28                               | 16                               | 4                                |                            | 21          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                | 7                                | 11                               | 32                               | 38                               | 21                               | 4                                |                            | 22          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 3                                | 6                                | 11                               | 55                               | 20                               | 12                               | 1                                | 3                          | 23          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 1                                |                                  | 6                                | 18                               | 37                               | 32                               | 6                                | 8                                | 2                          | 24          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 1                                |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 14                               | 37                               | 38                               | 6                                | 8                                | 2                          | 25          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 1                                | 4                                | 9                                | 21                               | 36                               | 28                               | 1                                | 10                         | 26          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 6                                | 21                               | 55                               | 68                               | 55                               | 13                               | 4                          | 27          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 10                               | 17                               | 86                               | 48                               | 40                               | 11                               | 1                          | 28          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 10                               | 23                               | 102                              | 68                               | 69                               | 18                               | 3                          | 29          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 8                                | 25                               | 102                              | 88                               | 44                               | 27                               | 2                          | 30          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                | 20                               | 11                               | 11                               | 6                                | 6                                |                                  |                            | 31          |
|                                               |                                |                                |                                 | 1                                |                                  | 1                                |                                  |                                  | 18                               | 20                               | 16                               |                                  |                                  |                                  |                            | 32          |
|                                               |                                |                                |                                 |                                  |                                  | 1                                | 1                                |                                  | 18                               | 22                               | 14                               |                                  |                                  |                                  |                            | 33          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                |                                  |                                  | 6                                | 24                               | 18                               | 4                                |                                  |                                  |                            | 34          |
|                                               |                                |                                |                                 | 2                                | 2                                | 2                                | 5                                |                                  | 15                               | 26                               | 19                               | 4                                |                                  |                                  |                            | 35          |
|                                               |                                |                                |                                 | 2                                | 2                                | 2                                | 4                                | 11                               | 20                               | 14                               | 20                               |                                  |                                  |                                  |                            | 36          |
|                                               |                                |                                |                                 | 2                                | 3                                | 2                                | 4                                | 7                                | 14                               | 26                               | 15                               |                                  |                                  |                                  |                            | 37          |
|                                               |                                |                                |                                 | 2                                | 3                                | 2                                | 4                                | 7                                | 14                               | 26                               | 9                                |                                  |                                  |                                  |                            | 38          |
|                                               |                                |                                |                                 |                                  | 7                                | 2                                | 1                                | 2                                | 12                               | 9                                | 25                               | 10                               |                                  |                                  |                            | 39          |
|                                               |                                |                                |                                 | 2                                | 7                                |                                  | 2                                | 8                                | 20                               | 19                               | 43                               | 14                               | 2                                |                                  |                            | 40          |
|                                               |                                |                                |                                 | 3                                | 3                                | 2                                | 4                                | 7                                | 26                               | 37                               | 28                               | 6                                |                                  |                                  |                            | 41          |
|                                               |                                |                                |                                 | 3                                | 3                                | 2                                | 6                                | 11                               | 39                               | 41                               | 33                               | 6                                |                                  |                                  |                            | 42          |
|                                               |                                |                                |                                 | 1                                | 6                                | 4                                | 2                                | 5                                | 23                               | 38                               | 54                               | 8                                |                                  |                                  |                            | 43          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                |                                  | 9                                | 6                                | 6                                |                                  | 9                                | 9                                |                            | 44          |
|                                               |                                |                                |                                 | 2                                |                                  |                                  |                                  | 9                                | 2                                | 6                                | 20                               |                                  |                                  |                                  |                            | 45          |
|                                               |                                |                                |                                 | 1                                |                                  | 1                                | 1                                |                                  | 8                                | 10                               | 18                               |                                  |                                  |                                  |                            | 46          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                |                                  |                                  | 2                                | 9                                | 26                               |                                  |                                  |                                  |                            | 47          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                |                                  | 6                                | 19                               | 9                                | 28                               |                                  |                                  |                                  |                            | 48          |
|                                               |                                |                                |                                 |                                  |                                  | 3                                | 3                                | 11                               | 17                               | 18                               | 7                                | 3                                |                                  |                                  |                            | 49          |
|                                               |                                |                                |                                 |                                  |                                  | 4                                |                                  | 9                                | 14                               | 9                                | 17                               |                                  |                                  |                                  |                            | 50          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  | 2                                |                                  | 6                                | 9                                | 14                               | 9                                | 17                               |                                  |                                  |                                  |                            | 51          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                | 9                                | 14                               | 4                                | 22                               | 6                                |                                  |                                  |                            | 52          |

# 336 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

TABLE O.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1907 TO 1915—

| Line No. | Occupation, and number of plants.                         | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|-----------------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                                           |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Stranders, 9-inch—<br>15 plants.....                      | 1913  | 82                   | 56.7                              | \$0.287                         | \$16.00                            | 18                                             | 21                   | 15              |    | 26                   | 2  |                      |    |
| 2        |                                                           | 1914  | 86                   | 56.5                              | .271                            | 15.04                              | 18                                             | 25                   | 15              |    | 26                   | 2  |                      |    |
| 3        | 16 plants.....                                            | 1914  | 96                   | 56.8                              | .275                            | 15.41                              | 18                                             | 25                   | 19              |    | 34                   |    |                      |    |
| 4        |                                                           | 1915  | 98                   | 56.4                              | .270                            | 15.15                              | 27                                             | 18                   | 19              |    | 34                   |    |                      |    |
| 5        | Stranders, 10-inch:<br>5 plants.....                      | 1907  | 43                   | 55.1                              | .354                            | 19.47                              | 21                                             |                      | 4               |    | 8                    | 10 |                      |    |
| 6        |                                                           | 1908  | 43                   | 55.1                              | .320                            | 17.08                              | 21                                             |                      | 4               |    | 8                    | 10 |                      |    |
| 7        |                                                           | 1909  | 43                   | 55.0                              | .378                            | 19.95                              | 21                                             |                      | 4               |    | 18                   |    |                      |    |
| 8        |                                                           | 1910  | 43                   | 55.0                              | .444                            | 23.09                              | 21                                             |                      | 4               |    | 18                   |    |                      |    |
| 9        | 7 plants.....                                             | 1910  | 57                   | 57.7                              | .390                            | 21.13                              | 21                                             | 4                    |                 |    | 26                   | 6  |                      |    |
| 10       |                                                           | 1911  | 57                   | 56.7                              | .322                            | 17.35                              | 21                                             | 8                    |                 |    | 22                   | 6  |                      |    |
| 11       |                                                           | 1912  | 57                   | 56.7                              | .370                            | 19.71                              | 21                                             | 8                    |                 |    | 22                   | 6  |                      |    |
| 12       | 7 plants.....                                             | 1912  | 55                   | 55.2                              | .372                            | 19.39                              | 21                                             | 4                    | 12              |    | 18                   |    |                      |    |
| 13       |                                                           | 1913  | 55                   | 55.1                              | .392                            | 20.77                              | 21                                             | 4                    | 12              |    | 18                   |    |                      |    |
| 14       | 14 plants.....                                            | 1913  | 110                  | 57.6                              | .386                            | 22.35                              | 28                                             | 12                   | 32              |    | 38                   |    |                      |    |
| 15       |                                                           | 1914  | 107                  | 57.1                              | .354                            | 20.07                              | 28                                             | 12                   | 29              |    | 38                   |    |                      |    |
| 16       | 22 plants.....                                            | 1914  | 172                  | 57.6                              | .341                            | 19.63                              | 28                                             | 49                   | 33              |    | 62                   |    |                      |    |
| 17       |                                                           | 1915  | 172                  | 57.2                              | .343                            | 19.60                              | 43                                             | 34                   | 33              |    | 51                   | 11 |                      |    |
| 18       | Stranders, 12-inch:<br>3 plants.....                      | 1907  | 13                   | 69.0                              | .352                            | 24.53                              |                                                |                      |                 |    | 5                    | 8  |                      |    |
| 19       |                                                           | 1908  | 14                   | 70.4                              | .284                            | 19.99                              |                                                |                      |                 |    | 4                    | 10 |                      |    |
| 20       |                                                           | 1909  | 14                   | 70.4                              | .293                            | 20.62                              |                                                |                      |                 |    | 4                    | 10 |                      |    |
| 21       |                                                           | 1910  | 16                   | 69.1                              | .411                            | 28.82                              |                                                |                      |                 |    | 6                    | 10 |                      |    |
| 22       | 9 plants.....                                             | 1910  | 48                   | 64.4                              | .286                            | 18.71                              | 3                                              | 10                   |                 | 2  | 13                   | 20 |                      |    |
| 23       |                                                           | 1911  | 40                   | 65.3                              | .271                            | 17.71                              | 3                                              | 7                    | 1               |    | 9                    | 20 |                      |    |
| 24       |                                                           | 1912  | 43                   | 64.7                              | .309                            | 20.38                              | 3                                              | 6                    | 6               |    | 8                    | 20 |                      |    |
| 25       |                                                           | 1913  | 49                   | 62.4                              | .319                            | 20.28                              |                                                | 15                   | 6               |    | 18                   | 10 |                      |    |
| 26       | 16 plants.....                                            | 1913  | 92                   | 61.0                              | .351                            | 21.70                              |                                                | 35                   | 6               |    | 41                   | 10 |                      |    |
| 27       |                                                           | 1914  | 91                   | 60.8                              | .308                            | 19.01                              |                                                | 38                   | 6               |    | 35                   | 12 |                      |    |
| 28       | 22 plants.....                                            | 1914  | 116                  | 59.5                              | .312                            | 18.75                              |                                                | 56                   | 10              |    | 38                   | 12 |                      |    |
| 29       |                                                           | 1915  | 97                   | 59.3                              | .334                            | 19.85                              | 6                                              | 39                   | 8               |    | 36                   | 8  |                      |    |
| 30       | Stranders, 13-inch, 14-inch, and 15-inch:<br>1 plant..... | 1907  | 20                   | 60.0                              | .233                            | 14.00                              |                                                |                      |                 | 20 |                      |    |                      |    |
| 31       |                                                           | 1908  | 20                   | 60.0                              | .201                            | 12.06                              |                                                |                      |                 | 20 |                      |    |                      |    |
| 32       |                                                           | 1909  | 20                   | 60.0                              | .211                            | 12.65                              |                                                |                      |                 | 20 |                      |    |                      |    |
| 33       |                                                           | 1910  | 26                   | 60.0                              | .224                            | 13.46                              |                                                |                      |                 | 26 |                      |    |                      |    |
| 34       |                                                           | 1911  | 20                   | 60.0                              | .221                            | 13.25                              |                                                |                      |                 | 20 |                      |    |                      |    |
| 35       |                                                           | 1912  | 22                   | 60.0                              | .217                            | 13.01                              |                                                |                      |                 | 22 |                      |    |                      |    |
| 36       |                                                           | 1913  | 11                   | 60.0                              | .255                            | 15.27                              |                                                |                      |                 | 11 |                      |    |                      |    |
| 37       | 5 plants.....                                             | 1913  | 39                   | 61.6                              | .348                            | 20.96                              |                                                | 9                    |                 | 13 | 13                   | 4  |                      |    |
| 38       |                                                           | 1914  | 39                   | 61.6                              | .350                            | 21.66                              |                                                | 9                    |                 | 13 | 13                   | 4  |                      |    |
| 39       | 7 plants.....                                             | 1914  | 48                   | 61.3                              | .357                            | 21.92                              |                                                | 9                    | 3               | 13 | 19                   | 4  |                      |    |
| 40       |                                                           | 1915  | 52                   | 59.2                              | .365                            | 21.69                              | 9                                              | 13                   | 6               |    | 20                   | 4  |                      |    |
| 41       | Stranders, 16-inch:<br>1 plant.....                       | 1907  | 2                    | 65.0                              | .361                            | 23.47                              |                                                |                      |                 |    | 2                    |    |                      |    |
| 42       |                                                           | 1908  | 2                    | 65.0                              | .344                            | 22.36                              |                                                |                      |                 |    | 2                    |    |                      |    |
| 43       |                                                           | 1909  | 2                    | 65.0                              | .299                            | 19.44                              |                                                |                      |                 |    | 2                    |    |                      |    |
| 44       |                                                           | 1910  | 2                    | 65.0                              | .484                            | 31.46                              |                                                |                      |                 |    | 2                    |    |                      |    |
| 45       |                                                           | 1911  | 2                    | 65.0                              | .480                            | 31.20                              |                                                |                      |                 |    | 2                    |    |                      |    |
| 46       | 2 plants.....                                             | 1911  | 10                   | 57.0                              | .424                            | 24.28                              |                                                | 8                    |                 |    | 2                    |    |                      |    |
| 47       |                                                           | 1912  | 10                   | 57.0                              | .405                            | 22.86                              |                                                | 8                    |                 |    | 2                    |    |                      |    |
| 48       | 1 plant.....                                              | 1912  | 8                    | 55.0                              | .431                            | 23.71                              |                                                | 8                    |                 |    |                      |    |                      |    |
| 49       |                                                           | 1913  | 8                    | 55.0                              | .523                            | 28.77                              |                                                | 8                    |                 |    |                      |    |                      |    |
| 50       | 10 plants.....                                            | 1913  | 35                   | 53.8                              | .439                            | 24.21                              | 13                                             | 9                    | 3               |    | 10                   |    |                      |    |
| 51       |                                                           | 1914  | 31                   | 53.8                              | .428                            | 23.23                              | 12                                             | 9                    | 2               |    | 9                    |    |                      |    |
| 52       | 14 plants.....                                            | 1914  | 43                   | 56.9                              | .445                            | 25.57                              | 11                                             | 9                    | 2               |    | 21                   |    |                      |    |
| 53       |                                                           | 1915  | 41                   | 57.9                              | .427                            | 25.12                              | 8                                              | 9                    | 3               |    | 21                   |    |                      |    |



TABLE O.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1907 TO 1915—

| Line No. | Occupation, and number of plants.    | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |       |                      |       |                      |
|----------|--------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-------|----------------------|-------|----------------------|
|          |                                      |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60    | Over 60 and under 72 | 72    | Over 72 and under 84 |
| 1        | Stranders, 18-inch: 6 plants.....    | 1913  | 16                   | 59.1                              | \$0.444                         | \$26.70                            | .....                                          | 6                    | 4               | ..... | 6                    | ..... | .....                |
| 2        |                                      | 1914  | 15                   | 59.4                              | .424                            | 25.45                              | .....                                          | 5                    | 4               | ..... | 6                    | ..... | .....                |
| 3        | 7 plants.....                        | 1914  | 16                   | 59.3                              | .436                            | 26.03                              | .....                                          | 5                    | 5               | ..... | 6                    | ..... | .....                |
| 4        |                                      | 1915  | 14                   | 60.0                              | .469                            | 28.30                              | .....                                          | 3                    | 5               | ..... | 6                    | ..... | .....                |
| 5        | Stranders, all sizes: 13 plants..... | 1907  | 175                  | 59.5                              | .334                            | 19.45                              | 39                                             | 6                    | 24              | 20    | 60                   | 26    | .....                |
| 6        |                                      | 1908  | 174                  | 59.7                              | .277                            | 16.25                              | 39                                             | 6                    | 24              | 20    | 55                   | 30    | .....                |
| 7        |                                      | 1909  | 174                  | 59.7                              | .297                            | 17.34                              | 39                                             | 6                    | 24              | 20    | 73                   | 12    | .....                |
| 8        |                                      | 1910  | 180                  | 59.7                              | .344                            | 20.06                              | 39                                             | 6                    | 22              | 26    | 75                   | 12    | .....                |
| 9        | 21 plants.....                       | 1910  | 272                  | 60.6                              | .301                            | 17.85                              | 48                                             | 25                   | 19              | 38    | 108                  | 34    | .....                |
| 10       |                                      | 1911  | 254                  | 59.9                              | .268                            | 15.83                              | 48                                             | 36                   | 26              | 20    | 90                   | 34    | .....                |
| 11       | 22 plants.....                       | 1911  | 262                  | 59.8                              | .272                            | 16.03                              | 48                                             | 44                   | 26              | 20    | 90                   | 34    | .....                |
| 12       |                                      | 1912  | 266                  | 59.6                              | .283                            | 16.62                              | 48                                             | 48                   | 27              | 22    | 87                   | 34    | .....                |
| 13       | 20 plants.....                       | 1912  | 252                  | 59.2                              | .284                            | 16.56                              | 48                                             | 35                   | 51              | 22    | 68                   | 28    | .....                |
| 14       |                                      | 1913  | 246                  | 58.7                              | .328                            | 19.07                              | 39                                             | 52                   | 48              | 11    | 84                   | 12    | .....                |
| 15       | 42 plants.....                       | 1913  | 491                  | 58.3                              | .345                            | 20.15                              | .....                                          | 150                  | 163             | ..... | 174                  | 4     | .....                |
| 16       |                                      | 1914  | 485                  | 58.3                              | .316                            | 18.39                              | .....                                          | 188                  | 149             | ..... | 142                  | 6     | .....                |
| 17       | 56 plants.....                       | 1914  | 635                  | 58.4                              | .318                            | 18.57                              | .....                                          | 156                  | 209             | 70    | 198                  | 2     | .....                |
| 18       |                                      | 1915  | 615                  | 58.1                              | .326                            | 18.99                              | .....                                          | 146                  | 327             | ..... | 140                  | 2     | .....                |
| 19       | Finishers, 8-inch: 6 plants.....     | 1907  | 14                   | 64.5                              | .298                            | 19.43                              | .....                                          | 1                    | 3               | 2     | 5                    | 3     | .....                |
| 20       |                                      | 1908  | 14                   | 64.8                              | .277                            | 18.03                              | .....                                          | 2                    | 2               | 1     | 6                    | 3     | .....                |
| 21       |                                      | 1909  | 14                   | 64.7                              | .290                            | 18.77                              | .....                                          | 2                    | 2               | 1     | 9                    | ..... | .....                |
| 22       |                                      | 1910  | 13                   | 65.1                              | .309                            | 20.19                              | .....                                          | 2                    | 1               | ..... | 10                   | ..... | .....                |
| 23       | 9 plants.....                        | 1910  | 24                   | 60.6                              | .303                            | 18.24                              | 6                                              | 2                    | 2               | ..... | 14                   | ..... | .....                |
| 24       |                                      | 1911  | 25                   | 59.6                              | .302                            | 18.01                              | 6                                              | 3                    | 5               | 1     | 10                   | ..... | .....                |
| 25       |                                      | 1912  | 25                   | 59.6                              | .295                            | 17.60                              | 6                                              | 4                    | 3               | 1     | 11                   | ..... | .....                |
| 26       |                                      | 1913  | 31                   | 59.3                              | .301                            | 17.84                              | 6                                              | 2                    | 13              | 1     | 9                    | ..... | .....                |
| 27       | 10 plants.....                       | 1913  | 31                   | 59.4                              | .354                            | 21.07                              | .....                                          | 10                   | 11              | 1     | 9                    | ..... | .....                |
| 28       | 13 plants.....                       | 1913  | 34                   | 59.2                              | .328                            | 19.53                              | 2                                              | 10                   | 10              | ..... | 12                   | ..... | .....                |
| 29       |                                      | 1914  | 33                   | 60.2                              | .304                            | 18.30                              | 2                                              | 8                    | 7               | ..... | 16                   | ..... | .....                |
| 30       | 18 plants.....                       | 1914  | 42                   | 60.4                              | .303                            | 18.37                              | 2                                              | 11                   | 7               | 1     | 21                   | ..... | .....                |
| 31       |                                      | 1915  | 42                   | 60.4                              | .319                            | 19.29                              | 8                                              | 4                    | 6               | 2     | 20                   | 2     | .....                |
| 32       | Finishers, 9-inch: 5 plants.....     | 1907  | 15                   | 66.8                              | .244                            | 16.24                              | .....                                          | .....                | .....           | 2     | 11                   | 2     | .....                |
| 33       |                                      | 1908  | 14                   | 67.9                              | .245                            | 16.53                              | .....                                          | .....                | .....           | 1     | 11                   | 2     | .....                |
| 34       |                                      | 1909  | 14                   | 67.8                              | .254                            | 17.10                              | .....                                          | .....                | .....           | 1     | 12                   | 1     | .....                |
| 35       |                                      | 1910  | 14                   | 67.8                              | .261                            | 17.58                              | .....                                          | .....                | .....           | ..... | 13                   | 1     | .....                |
| 36       | 9 plants.....                        | 1910  | 24                   | 64.3                              | .287                            | 17.98                              | 3                                              | 1                    | .....           | 2     | 15                   | 3     | .....                |
| 37       |                                      | 1911  | 23                   | 63.8                              | .272                            | 17.18                              | 3                                              | 3                    | .....           | 1     | 13                   | 3     | .....                |
| 38       |                                      | 1912  | 24                   | 63.4                              | .282                            | 17.61                              | 3                                              | 4                    | .....           | 1     | 13                   | 3     | .....                |
| 39       |                                      | 1913  | 24                   | 63.2                              | .293                            | 18.26                              | .....                                          | 6                    | 2               | 1     | 14                   | 1     | .....                |
| 40       | 14 plants.....                       | 1913  | 32                   | 61.8                              | .273                            | 16.79                              | .....                                          | 9                    | 5               | ..... | 17                   | 1     | .....                |
| 41       |                                      | 1914  | 32                   | 61.8                              | .268                            | 16.45                              | .....                                          | 9                    | 5               | 1     | 16                   | 1     | .....                |
| 42       | 14 plants.....                       | 1914  | 33                   | 61.4                              | .286                            | 17.52                              | .....                                          | 10                   | 5               | 2     | 16                   | ..... | .....                |
| 43       |                                      | 1915  | 33                   | 61.0                              | .287                            | 17.53                              | 3                                              | 7                    | 5               | 2     | 16                   | ..... | .....                |
| 44       | Finishers, 10-inch: 4 plants.....    | 1907  | 10                   | 68.0                              | .396                            | 27.29                              | .....                                          | .....                | 2               | ..... | 2                    | 6     | .....                |
| 45       |                                      | 1908  | 10                   | 68.0                              | .342                            | 23.48                              | .....                                          | .....                | 2               | ..... | 2                    | 6     | .....                |
| 46       |                                      | 1909  | 10                   | 67.7                              | .387                            | 26.16                              | .....                                          | .....                | 2               | ..... | 7                    | 1     | .....                |
| 47       |                                      | 1910  | 10                   | 67.7                              | .412                            | 28.19                              | .....                                          | .....                | 2               | ..... | 8                    | ..... | .....                |
| 48       | 5 plants.....                        | 1910  | 12                   | 69.3                              | .376                            | 26.20                              | .....                                          | .....                | .....           | ..... | 10                   | 2     | .....                |
| 49       |                                      | 1911  | 12                   | 68.4                              | .329                            | 22.72                              | .....                                          | 1                    | .....           | ..... | 8                    | 3     | .....                |
| 50       |                                      | 1912  | 12                   | 68.4                              | .358                            | 24.73                              | .....                                          | 1                    | .....           | ..... | 8                    | 3     | .....                |
| 51       | 5 plants.....                        | 1912  | 12                   | 66.3                              | .367                            | 24.71                              | .....                                          | .....                | 4               | ..... | 7                    | 1     | .....                |
| 52       |                                      | 1913  | 12                   | 66.0                              | .427                            | 28.62                              | .....                                          | .....                | 4               | ..... | 7                    | 1     | .....                |

AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 1                                | 4                                | 2                                |                                  | 4                                | 4                                | 4                                |                            | 1           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 1                                | 3                                | 2                                |                                  | 1                                | 8                                | 1                                |                            | 2           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 2                                | 1                                | 2                                | 5                                | 3                                |                            | 3           |
|                                               |                                |                                |                                 |                                  |                                  | 2                                | 4                                | 6                                | 37                               | 28                               | 60                               | 14                               | 15                               | 9                                |                            | 5           |
|                                               |                                |                                |                                 |                                  | 3                                | 3                                | 2                                | 13                               | 44                               | 40                               | 69                               |                                  |                                  |                                  |                            | 6           |
|                                               |                                |                                |                                 |                                  | 1                                | 4                                | 4                                | 4                                | 42                               | 48                               | 63                               | 12                               |                                  |                                  |                            | 7           |
|                                               |                                |                                |                                 |                                  |                                  | 4                                |                                  | 8                                | 20                               | 45                               | 64                               | 16                               | 21                               |                                  |                            | 8           |
|                                               |                                |                                |                                 | 2                                | 2                                | 4                                | 11                               | 18                               | 74                               | 53                               | 71                               | 16                               | 21                               |                                  |                            | 9           |
|                                               |                                |                                |                                 | 2                                | 2                                | 6                                | 12                               | 43                               | 68                               | 43                               | 51                               | 27                               |                                  |                                  |                            | 10          |
|                                               |                                |                                |                                 | 2                                | 2                                | 6                                | 12                               | 43                               | 68                               | 43                               | 51                               | 35                               |                                  |                                  |                            | 11          |
|                                               |                                |                                |                                 | 2                                | 5                                | 6                                | 16                               | 31                               | 61                               | 58                               | 48                               | 17                               | 22                               |                                  |                            | 12          |
|                                               |                                |                                |                                 | 2                                | 5                                | 2                                | 16                               | 31                               | 65                               | 52                               | 40                               | 17                               | 22                               |                                  |                            | 13          |
|                                               |                                |                                |                                 |                                  | 7                                | 3                                | 13                               | 32                               | 52                               | 46                               | 67                               | 26                               | 32                               |                                  |                            | 14          |
|                                               |                                |                                |                                 | 2                                | 7                                |                                  | 8                                | 17                               | 78                               | 95                               | 147                              | 63                               | 61                               | 11                               | 2                          | 15          |
|                                               |                                |                                |                                 | 3                                | 6                                | 9                                | 4                                | 24                               | 90                               | 106                              | 156                              | 51                               | 36                               |                                  |                            | 16          |
|                                               |                                |                                |                                 | 3                                | 6                                | 15                               | 6                                | 24                               | 111                              | 133                              | 209                              | 77                               | 37                               | 3                                | 1                          | 17          |
|                                               |                                |                                |                                 | 2                                | 6                                | 8                                | 12                               | 26                               | 80                               | 114                              | 248                              | 74                               | 25                               | 18                               | 1                          | 18          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                | 4                                | 2                                | 4                                | 1                                | 1                                |                                  |                            | 19          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                | 4                                | 3                                | 3                                | 2                                |                                  |                                  |                            | 20          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                | 2                                | 2                                | 6                                | 2                                |                                  |                                  |                            | 21          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                | 2                                | 4                                | 5                                | 2                                |                                  |                                  |                            | 22          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                |                                  | 2                                | 7                                | 11                               | 2                                |                                  |                                  |                            | 23          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                |                                  | 2                                | 9                                | 10                               | 1                                | 1                                |                                  |                            | 24          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                |                                  | 3                                | 9                                | 9                                | 1                                | 1                                |                                  |                            | 25          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                |                                  | 3                                | 9                                | 15                               | 1                                | 1                                |                                  |                            | 26          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                | 4                                | 12                               | 5                                | 4                                |                                  |                                  |                            | 27          |
|                                               |                                |                                |                                 |                                  | 1                                |                                  |                                  | 2                                | 6                                | 6                                | 12                               | 3                                | 4                                |                                  |                            | 28          |
|                                               |                                |                                |                                 |                                  | 1                                |                                  |                                  | 1                                | 10                               | 4                                | 13                               | 3                                | 1                                |                                  |                            | 29          |
|                                               |                                |                                |                                 |                                  | 3                                |                                  |                                  | 1                                | 12                               | 4                                | 16                               | 5                                | 1                                |                                  |                            | 30          |
|                                               |                                |                                |                                 |                                  | 2                                | 2                                |                                  | 1                                | 8                                | 5                                | 16                               | 7                                | 1                                |                                  |                            | 31          |
|                                               |                                |                                | 1                               | 1                                |                                  |                                  |                                  | 2                                | 4                                | 5                                |                                  | 2                                |                                  |                                  |                            | 32          |
|                                               |                                |                                |                                 | 1                                | 2                                |                                  |                                  |                                  | 4                                | 5                                | 2                                |                                  |                                  |                                  |                            | 33          |
|                                               |                                |                                |                                 | 1                                |                                  |                                  | 1                                | 1                                | 4                                | 5                                | 2                                |                                  |                                  |                                  |                            | 34          |
|                                               |                                |                                |                                 | 1                                |                                  |                                  | 2                                |                                  | 4                                | 5                                |                                  | 2                                |                                  |                                  |                            | 35          |
|                                               |                                |                                |                                 |                                  | 1                                |                                  | 2                                |                                  | 6                                | 9                                | 1                                | 5                                |                                  |                                  |                            | 36          |
|                                               |                                |                                |                                 |                                  | 1                                |                                  | 1                                | 1                                | 6                                | 7                                | 5                                | 2                                |                                  |                                  |                            | 37          |
|                                               |                                |                                |                                 |                                  | 1                                |                                  | 1                                | 1                                | 4                                | 9                                | 6                                | 2                                |                                  |                                  |                            | 38          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                | 1                                |                                  | 13                               | 5                                | 3                                |                                  |                                  |                            | 39          |
|                                               |                                |                                |                                 |                                  |                                  | 1                                | 3                                | 2                                | 3                                | 11                               | 9                                | 3                                |                                  |                                  |                            | 40          |
|                                               |                                |                                |                                 |                                  | 1                                |                                  |                                  | 3                                |                                  | 11                               | 8                                | 4                                |                                  |                                  |                            | 41          |
|                                               |                                |                                |                                 |                                  | 1                                | 1                                | 1                                | 3                                | 2                                | 11                               | 8                                | 6                                |                                  |                                  |                            | 42          |
|                                               |                                |                                |                                 |                                  | 1                                | 1                                | 1                                | 3                                | 3                                | 10                               | 11                               | 4                                |                                  |                                  |                            | 43          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 4                                | 2                                |                                  |                            | 44          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 4                                | 2                                |                                  |                                  |                            | 45          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 5                                | 5                                |                                  |                                  |                            | 46          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 2                                | 2                                |                                  |                            | 47          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 4                                | 2                                | 2                                |                                  |                            | 48          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 1                                | 1                                | 2                                | 2                                | 2                                | 3                                | 1                                |                                  |                            | 49          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 5                                | 4                                | 1                                | 2                                |                                  |                            | 50          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 6                                | 1                                | 2                                |                                  |                            | 51          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 5                                | 2                                | 2                                | 2                                |                            | 52          |

TABLE O.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1907 TO 1915—

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Finishers, 10-inch—               | 1913  | 30                   | 55.2                              | \$0.424                         | \$23.36                            | 12                                             | 1                    | 8               |    | 9                    |    |                      |    |
| 2        | Concluded.                        | 1914  | 29                   | 55.5                              | .406                            | 22.25                              | 12                                             |                      | 7               |    | 10                   |    |                      |    |
| 3        | 19 plants.                        | 1914  | 45                   | 57.0                              | .400                            | 22.62                              | 12                                             | 6                    | 9               | 1  | 17                   |    |                      |    |
| 4        |                                   | 1915  | 44                   | 56.5                              | .417                            | 23.32                              | 15                                             | 4                    | 7               | 1  | 15                   | 2  |                      |    |
| 5        | Finishers, 12-inch:               | 1907  | 12                   | 69.3                              | .336                            | 23.28                              |                                                |                      |                 | 1  | 5                    | 6  |                      |    |
| 6        | 4 plants.                         | 1908  | 11                   | 70.5                              | .271                            | 19.04                              |                                                |                      |                 |    | 5                    | 6  |                      |    |
| 7        |                                   | 1909  | 11                   | 70.4                              | .297                            | 20.85                              |                                                |                      |                 |    | 7                    | 4  |                      |    |
| 8        |                                   | 1910  | 12                   | 69.5                              | .359                            | 24.97                              |                                                |                      |                 | 1  | 9                    | 2  |                      |    |
| 9        | 8 plants.                         | 1910  | 20                   | 65.8                              | .349                            | 22.74                              | 3                                              |                      |                 | 1  | 12                   | 4  |                      |    |
| 10       |                                   | 1911  | 19                   | 65.2                              | .324                            | 20.78                              | 3                                              | 1                    | 1               |    | 8                    | 6  |                      |    |
| 11       | 10 plants.                        | 1911  | 22                   | 63.7                              | .309                            | 19.51                              | 3                                              | 4                    | 1               |    | 8                    | 6  |                      |    |
| 12       |                                   | 1912  | 24                   | 63.0                              | .311                            | 19.81                              | 3                                              | 5                    | 2               | 1  | 7                    | 6  |                      |    |
| 13       |                                   | 1913  | 24                   | 62.8                              | .363                            | 22.70                              |                                                | 8                    | 2               | 1  | 9                    | 4  |                      |    |
| 14       | 17 plants.                        | 1913  | 38                   | 62.0                              | .340                            | 21.12                              |                                                | 13                   | 3               | 1  | 17                   | 4  |                      |    |
| 15       |                                   | 1914  | 35                   | 62.2                              | .295                            | 18.49                              |                                                | 12                   | 3               | 1  | 13                   | 6  |                      |    |
| 16       | 24 plants.                        | 1914  | 46                   | 61.1                              | .317                            | 19.37                              | 1                                              | 16                   | 5               | 1  | 17                   | 6  |                      |    |
| 17       |                                   | 1915  | 44                   | 61.3                              | .347                            | 21.34                              | 3                                              | 14                   | 3               | 2  | 17                   | 5  |                      |    |
| 18       | Finishers, 13-inch, 14-           | 1907  | 4                    | 60.0                              | .315                            | 18.90                              |                                                |                      |                 | 4  |                      |    |                      |    |
| 19       | inch, and 15-inch:                | 1908  | 4                    | 60.0                              | .275                            | 16.50                              |                                                |                      |                 | 4  |                      |    |                      |    |
| 20       | 1 plant.                          | 1909  | 4                    | 60.0                              | .288                            | 17.34                              |                                                |                      |                 | 4  |                      |    |                      |    |
| 21       |                                   | 1910  | 4                    | 60.0                              | .316                            | 18.96                              |                                                |                      |                 | 4  |                      |    |                      |    |
| 22       | 4 plants.                         | 1910  | 15                   | 64.0                              | .339                            | 21.01                              | 3                                              |                      |                 | 4  |                      | 8  |                      |    |
| 23       |                                   | 1911  | 15                   | 64.0                              | .316                            | 19.83                              | 3                                              |                      |                 | 4  |                      | 8  |                      |    |
| 24       |                                   | 1912  | 15                   | 64.0                              | .319                            | 19.97                              | 3                                              |                      |                 | 4  |                      | 8  |                      |    |
| 25       |                                   | 1913  | 13                   | 63.4                              | .345                            | 21.20                              |                                                | 3                    |                 | 2  | 4                    | 4  |                      |    |
| 26       | 5 plants.                         | 1913  | 15                   | 64.0                              | .347                            | 21.62                              |                                                | 3                    |                 | 4  | 2                    | 6  |                      |    |
| 27       |                                   | 1914  | 15                   | 64.0                              | .344                            | 21.93                              |                                                | 3                    |                 | 4  | 2                    | 6  |                      |    |
| 28       | 7 plants.                         | 1914  | 18                   | 63.3                              | .344                            | 21.67                              |                                                | 3                    | 1               | 4  | 4                    | 6  |                      |    |
| 29       |                                   | 1915  | 19                   | 61.8                              | .360                            | 22.07                              | 3                                              | 2                    | 2               | 2  | 6                    | 4  |                      |    |
| 30       | Finishers, 16-inch:               | 1907  | 8                    | 62.8                              | .262                            | 16.39                              |                                                |                      | 2               |    | 6                    |    |                      |    |
| 31       | 2 plants.                         | 1908  | 8                    | 62.8                              | .242                            | 15.11                              |                                                |                      | 2               |    | 6                    |    |                      |    |
| 32       |                                   | 1909  | 8                    | 62.8                              | .265                            | 15.68                              |                                                |                      | 2               |    | 6                    |    |                      |    |
| 33       |                                   | 1910  | 9                    | 62.2                              | .310                            | 19.37                              |                                                |                      | 3               |    | 6                    |    |                      |    |
| 34       | 3 plants.                         | 1910  | 11                   | 62.5                              | .324                            | 20.34                              |                                                |                      | 3               | 1  | 7                    |    |                      |    |
| 35       |                                   | 1911  | 11                   | 63.5                              | .325                            | 20.73                              |                                                |                      | 2               |    | 9                    |    |                      |    |
| 36       | 4 plants.                         | 1911  | 19                   | 61.1                              | .363                            | 22.08                              |                                                | 4                    | 2               |    | 13                   |    |                      |    |
| 37       |                                   | 1912  | 20                   | 61.1                              | .377                            | 22.77                              |                                                | 4                    | 2               |    | 14                   |    |                      |    |
| 38       |                                   | 1913  | 18                   | 61.1                              | .410                            | 24.87                              |                                                | 4                    | 2               |    | 12                   |    |                      |    |
| 39       | 8 plants.                         | 1913  | 21                   | 56.0                              | .380                            | 21.62                              | 6                                              | 5                    | 2               | 1  | 7                    |    |                      |    |
| 40       |                                   | 1914  | 18                   | 56.0                              | .380                            | 21.57                              | 5                                              | 5                    | 1               | 1  | 6                    |    |                      |    |
| 41       | 14 plants.                        | 1914  | 28                   | 58.9                              | .389                            | 23.14                              | 5                                              | 5                    | 2               | 3  | 13                   |    |                      |    |
| 42       |                                   | 1915  | 29                   | 58.8                              | .360                            | 21.39                              | 5                                              | 5                    | 3               | 2  | 14                   |    |                      |    |
| 43       | Finishers, 18-inch:               | 1907  | 2                    | 62.8                              | .435                            | 27.30                              |                                                |                      |                 |    | 2                    |    |                      |    |
| 44       | 1 plant.                          | 1908  | 2                    | 62.8                              | .417                            | 26.25                              |                                                |                      |                 | 1  | 1                    |    |                      |    |
| 45       |                                   | 1909  | 2                    | 62.8                              | .438                            | 27.48                              |                                                |                      |                 |    | 2                    |    |                      |    |
| 46       |                                   | 1910  | 2                    | 62.8                              | .438                            | 27.48                              |                                                |                      |                 |    | 2                    |    |                      |    |
| 47       | 3 plants.                         | 1910  | 5                    | 61.9                              | .308                            | 19.15                              |                                                |                      |                 | 2  | 3                    |    |                      |    |
| 48       |                                   | 1911  | 5                    | 60.7                              | .350                            | 21.38                              |                                                |                      | 1               | 2  | 2                    |    |                      |    |
| 49       |                                   | 1912  | 6                    | 58.9                              | .336                            | 20.02                              |                                                | 2                    |                 | 2  | 2                    |    |                      |    |
| 50       | 5 plants.                         | 1912  | 11                   | 58.6                              | .427                            | 25.19                              |                                                | 3                    | 4               | 2  | 2                    |    |                      |    |
| 51       |                                   | 1913  | 12                   | 58.7                              | .414                            | 24.47                              |                                                | 3                    | 4               | 3  | 2                    |    |                      |    |



AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 1                                | 7                                | 16                               | 2                                | 2                                |                            | 1           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 4                                | 7                                | 15                               | 2                                |                                  |                            | 2           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 3                                | 4                                | 13                               | 21                               | 4                                |                                  |                            | 3           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 1                                | 2                                | 13                               | 13                               | 14                               | 10                               | 2                                |                            | 4           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 2                                | 4                                |                                  |                                  |                            | 5           |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                |                                  | 2                                | 4                                | 2                                | 1                                |                                  |                                  |                            | 6           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 4                                | 4                                | 1                                |                                  |                                  |                            | 7           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 4                                | 2                                | 2                                |                                  |                            | 8           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 7                                | 6                                | 5                                | 2                                |                                  |                            | 9           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 6                                | 5                                | 2                                | 5                                | 1                                |                                  |                            | 10          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                | 6                                | 6                                | 2                                | 5                                | 1                                |                                  |                            | 11          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                | 5                                | 10                               | 3                                | 2                                |                                  |                                  |                            | 12          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                | 7                                | 9                                | 9                                | 1                                | 2                                | 3                                |                            | 13          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                |                                  | 2                                | 4                                | 9                                | 12                               | 2                                | 4                                | 3                                |                            | 14          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 6                                | 2                                | 13                               | 7                                | 5                                | 2                                | 2                                |                                  |                            | 15          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 5                                | 1                                | 7                                | 8                                | 5                                | 4                                | 1                                |                            | 16          |
|                                               |                                |                                |                                 |                                  |                                  | 1                                | 6                                | 4                                | 4                                | 13                               | 10                               | 6                                | 4                                | 1                                | 2                          | 17          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                |                                  |                                  |                                  |                            | 18          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                |                                  |                                  |                                  |                                  |                            | 19          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                |                                  |                                  |                                  |                            | 20          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 21          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 6                                |                                  | 3                                |                                  |                            | 22          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 10                               | 1                                |                                  |                                  |                            | 23          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 8                                | 3                                |                                  |                                  |                            | 24          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 4                                | 2                                | 1                                |                                  |                            | 25          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 2                                | 1                                |                                  |                            | 26          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 12                               | 1                                |                                  |                                  |                            | 27          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 14                               | 2                                |                                  |                                  |                            | 28          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 9                                | 6                                |                                  |                                  |                            | 29          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 4                                | 4                                |                                  |                                  |                                  |                                  |                            | 30          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 5                                | 3                                |                                  |                                  |                                  |                                  |                            | 31          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 6                                |                                  |                                  |                                  |                                  |                                  |                            | 32          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 3                                |                                  | 6                                |                                  |                                  |                                  |                            | 33          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 8                                |                                  |                                  |                                  |                            | 34          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 9                                |                                  |                                  |                                  |                                  |                            | 35          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 11                               | 6                                |                                  |                                  |                            | 36          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                |                                  | 8                                | 2                                | 4                                | 4                                |                                  | 4                                |                            | 37          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 10                               | 4                                |                                  | 4                                |                                  |                            | 38          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 1                                | 3                                |                                  | 8                                | 5                                | 4                                |                                  |                            | 39          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 4                                | 2                                | 6                                |                                  | 4                                | 2                                |                            | 40          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 5                                | 5                                | 8                                | 2                                | 4                                |                                  |                            | 41          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 1                                | 3                                | 7                                | 9                                | 7                                |                                  | 2                                | 2                          | 42          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                            | 43          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                |                                  |                                  |                            | 44          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                            | 45          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                            | 46          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 3                                |                                  |                                  | 2                                |                                  |                                  |                            | 47          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 2                                | 2                                |                                  |                                  |                            | 48          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 2                                |                                  |                                  |                            | 49          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 2                                | 4                                |                                  |                            | 50          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 4                                | 2                                | 4                                |                                  |                            | 51          |

TABLE O.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1907 TO 1915—

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |     |                      |    |                      |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-----|----------------------|----|----------------------|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60  | Over 60 and under 72 | 72 | Over 72 and under 84 |
| 1        | Finishers, 18-inch—               | 1913  | 12                   | 59.3                              | \$0.415                         | \$24.70                            | 4                                              | 2                    | 6               | 5   | 17                   |    |                      |
| 2        | 7 plants.....                     | 1914  | 11                   | 59.8                              | .393                            | 23.46                              | 3                                              | 2                    | 1               | 5   | 17                   |    |                      |
| 3        | 7 plants.....                     | 1914  | 11                   | 59.8                              | .393                            | 23.46                              | 3                                              | 2                    | 1               | 5   | 17                   |    |                      |
| 4        | 7 plants.....                     | 1915  | 11                   | 60.0                              | .390                            | 23.39                              | 3                                              | 2                    | 1               | 5   | 17                   |    |                      |
| 5        | Finishers, all sizes:             | 1907  | 65                   | 65.9                              | .309                            | 20.45                              | 1                                              | 7                    | 9               | 31  | 17                   |    |                      |
| 6        | 10 plants.....                    | 1908  | 63                   | 66.4                              | .279                            | 18.53                              | 2                                              | 6                    | 7               | 31  | 17                   |    |                      |
| 7        | 10 plants.....                    | 1909  | 63                   | 66.2                              | .300                            | 19.85                              | 2                                              | 6                    | 6               | 43  | 6                    |    |                      |
| 8        | 10 plants.....                    | 1910  | 64                   | 66.1                              | .329                            | 21.80                              | 2                                              | 6                    | 5               | 48  | 3                    |    |                      |
| 9        | 17 plants.....                    | 1910  | 111                  | 64.0                              | .323                            | 20.48                              | 15                                             | 3                    | 5               | 10  | 61                   | 17 |                      |
| 10       | 17 plants.....                    | 1911  | 110                  | 63.4                              | .309                            | 19.50                              | 15                                             | 8                    | 9               | 50  | 20                   |    |                      |
| 11       | 19 plants.....                    | 1911  | 121                  | 62.8                              | .313                            | 19.60                              | 15                                             | 15                   | 9               | 8   | 54                   | 20 |                      |
| 12       | 19 plants.....                    | 1912  | 120                  | 62.5                              | .319                            | 19.92                              | 15                                             | 20                   | 7               | 9   | 55                   | 20 |                      |
| 13       | 21 plants.....                    | 1912  | 137                  | 62.0                              | .328                            | 20.29                              | 15                                             | 18                   | 25              | 9   | 52                   | 18 |                      |
| 14       | 21 plants.....                    | 1913  | 134                  | 61.8                              | .303                            | 22.36                              | 14                                             | 34                   | 25              | 8   | 57                   | 10 |                      |
| 15       | 40 plants.....                    | 1913  | 182                  | 59.6                              | .350                            | 20.77                              | 48                                             | 67                   | 3               | 63  | 4                    |    |                      |
| 16       | 40 plants.....                    | 1914  | 173                  | 60.0                              | .330                            | 19.64                              | 26                                             | 60                   | 3               | 80  | 4                    |    |                      |
| 17       | 54 plants.....                    | 1914  | 223                  | 60.0                              | .341                            | 20.42                              | 19                                             | 78                   | 3               | 123 |                      |    |                      |
| 18       | 54 plants.....                    | 1915  | 222                  | 59.8                              | .352                            | 20.95                              | 44                                             | 62                   | 3               | 113 |                      |    |                      |
| 19       | Hook-ups, 12-inch:                | 1907  | 49                   | 64.8                              | .289                            | 18.98                              | 9                                              |                      |                 | 16  | 24                   |    |                      |
| 20       | 6 plants.....                     | 1908  | 37                   | 69.1                              | .230                            | 15.75                              | 3                                              |                      |                 | 6   | 28                   |    |                      |
| 21       | 6 plants.....                     | 1909  | 37                   | 68.9                              | .241                            | 16.46                              | 3                                              |                      |                 | 14  | 20                   |    |                      |
| 22       | 6 plants.....                     | 1910  | 37                   | 69.9                              | .318                            | 22.33                              |                                                |                      |                 | 19  | 18                   |    |                      |
| 23       | 13 plants.....                    | 1910  | 69                   | 62.8                              | .282                            | 17.93                              | 18                                             | 4                    | 2               | 23  | 22                   |    |                      |
| 24       | 13 plants.....                    | 1911  | 53                   | 63.4                              | .244                            | 15.38                              | 12                                             | 4                    | 2               | 19  | 16                   |    |                      |
| 25       | 13 plants.....                    | 1912  | 56                   | 62.5                              | .269                            | 17.15                              | 12                                             | 7                    | 2               | 20  | 15                   |    |                      |
| 26       | 13 plants.....                    | 1913  | 58                   | 61.5                              | .323                            | 19.68                              | 3                                              | 20                   | 2               | 22  | 11                   |    |                      |
| 27       | 16 plants.....                    | 1913  | 66                   | 60.8                              | .311                            | 18.97                              | 3                                              | 24                   | 3               | 36  |                      |    |                      |
| 28       | 16 plants.....                    | 1914  | 64                   | 60.2                              | .257                            | 15.60                              | 3                                              | 27                   | 3               | 21  | 10                   |    |                      |
| 29       | 20 plants.....                    | 1914  | 72                   | 59.9                              | .258                            | 15.62                              | 3                                              | 31                   | 5               | 23  | 10                   |    |                      |
| 30       | 20 plants.....                    | 1915  | 63                   | 60.5                              | .293                            | 17.71                              | 12                                             | 13                   | 5               | 22  | 11                   |    |                      |
| 31       | Hook-ups, 13-inch,                | 1907  | 8                    | 60.0                              | .184                            | 11.04                              |                                                |                      |                 | 8   |                      |    |                      |
| 32       | 14-inch, and 15-inch:             | 1908  | 14                   | 60.0                              | .163                            | 9.77                               |                                                |                      |                 | 14  |                      |    |                      |
| 33       | 1 plant.....                      | 1909  | 8                    | 60.0                              | .173                            | 10.40                              |                                                |                      |                 | 8   |                      |    |                      |
| 34       | 1 plant.....                      | 1910  | 12                   | 60.0                              | .197                            | 11.84                              |                                                |                      |                 | 12  |                      |    |                      |
| 35       | 5 plants.....                     | 1910  | 50                   | 64.2                              | .237                            | 14.66                              | 9                                              |                      |                 | 12  | 8                    | 21 |                      |
| 36       | 5 plants.....                     | 1911  | 45                   | 64.2                              | .225                            | 14.06                              | 9                                              |                      |                 | 9   | 7                    | 20 |                      |
| 37       | 5 plants.....                     | 1912  | 51                   | 63.8                              | .229                            | 14.29                              | 9                                              |                      |                 | 14  | 8                    | 20 |                      |
| 38       | 5 plants.....                     | 1913  | 43                   | 63.8                              | .263                            | 16.32                              |                                                | 9                    |                 | 7   | 15                   | 12 |                      |
| 39       | 6 plants.....                     | 1913  | 43                   | 63.5                              | .263                            | 16.25                              | 3                                              | 6                    |                 | 7   | 15                   | 12 |                      |
| 40       | 6 plants.....                     | 1914  | 44                   | 63.6                              | .266                            | 16.82                              | 3                                              | 6                    |                 | 7   | 16                   | 12 |                      |
| 41       | 8 plants.....                     | 1914  | 47                   | 63.4                              | .267                            | 16.82                              | 3                                              | 6                    | 1               | 7   | 18                   | 12 |                      |
| 42       | 8 plants.....                     | 1915  | 48                   | 61.9                              | .273                            | 16.70                              | 9                                              | 7                    | 2               |     | 18                   | 12 |                      |
| 43       | Hook-ups, 16-inch:                | 1907  | 26                   | 63.9                              | .263                            | 16.91                              |                                                |                      | 2               |     | 24                   |    |                      |
| 44       | 5 plants.....                     | 1908  | 23                   | 64.4                              | .269                            | 17.35                              |                                                |                      | 2               |     | 21                   |    |                      |
| 45       | 5 plants.....                     | 1909  | 27                   | 64.7                              | .274                            | 17.80                              |                                                |                      | 2               |     | 25                   |    |                      |
| 46       | 5 plants.....                     | 1910  | 35                   | 64.1                              | .326                            | 20.97                              |                                                |                      | 2               |     | 33                   |    |                      |
| 47       | 5 plants.....                     | 1911  | 25                   | 64.4                              | .337                            | 21.83                              |                                                |                      | 2               |     | 23                   |    |                      |
| 48       | 6 plants.....                     | 1911  | 35                   | 62.4                              | .308                            | 19.43                              |                                                | 6                    | 2               |     | 27                   |    |                      |
| 49       | 6 plants.....                     | 1912  | 36                   | 61.5                              | .269                            | 16.61                              |                                                | 8                    | 2               |     | 26                   |    |                      |
| 50       | 5 plants.....                     | 1912  | 32                   | 61.1                              | .263                            | 16.08                              |                                                | 8                    | 2               |     | 22                   |    |                      |
| 51       | 5 plants.....                     | 1913  | 34                   | 61.5                              | .329                            | 20.28                              |                                                | 8                    | 2               |     | 24                   |    |                      |

AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                |                                |                                 |                                  | 1                                |                                  |                                  | 1                                |                                  | 2<br>1                           | 6<br>4                           | 2<br>2                           |                                  |                                  | 2<br>2                     | 1<br>2      |
|                                               |                                |                                |                                 |                                  | 1                                |                                  |                                  | 1                                |                                  | 1                                | 4<br>4                           | 2                                |                                  |                                  | 2                          | 3           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 2                                | 4                                | 2                                |                                  | 2                                |                            | 4           |
|                                               |                                |                                |                                 | 1                                | 1                                |                                  |                                  | 4                                | 12                               | 19                               | 12                               | 13                               | 3                                |                                  |                            | 5           |
|                                               |                                |                                |                                 | 1                                | 1                                | 2                                | 2                                | 2                                | 15                               | 23                               | 12                               | 6                                |                                  |                                  |                            | 6           |
|                                               |                                |                                |                                 | 1                                | 1                                |                                  | 1                                | 3                                | 10                               | 21                               | 17                               | 10                               |                                  |                                  |                            | 7           |
|                                               |                                |                                |                                 | 1                                | 1                                |                                  | 2                                |                                  | 6                                | 16                               | 25                               | 10                               | 4                                |                                  |                            | 8           |
|                                               |                                |                                |                                 |                                  | 1                                |                                  |                                  | 4                                | 13                               | 34                               | 36                               | 16                               | 7                                |                                  |                            | 9           |
|                                               |                                |                                |                                 |                                  | 1                                |                                  | 4                                | 2                                | 16                               | 30                               | 40                               | 14                               | 3                                |                                  |                            | 10          |
|                                               |                                |                                |                                 |                                  | 1                                |                                  | 4                                | 4                                | 16                               | 31                               | 42                               | 20                               | 3                                |                                  |                            | 11          |
|                                               |                                |                                |                                 |                                  | 1                                |                                  | 5                                | 3                                | 12                               | 47                               | 34                               | 15                               | 3                                | 6                                |                            | 12          |
|                                               |                                |                                |                                 |                                  | 1                                |                                  |                                  | 3                                | 12                               | 45                               | 43                               | 15                               | 7                                | 6                                |                            | 13          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 5                                | 3                                | 4                                | 33                               | 49                               | 19                               | 17                               | 5                                |                            | 14          |
|                                               |                                |                                |                                 |                                  |                                  | 4                                | 3                                | 7                                | 18                               | 35                               | 60                               | 33                               | 15                               | 5                                | 2                          | 15          |
|                                               |                                |                                |                                 |                                  | 2                                | 4                                | 8                                | 7                                | 15                               | 37                               | 57                               | 30                               | 9                                | 2                                | 2                          | 16          |
|                                               |                                |                                |                                 | 1                                | 3                                | 4                                | 6                                | 9                                | 23                               | 40                               | 70                               | 46                               | 14                               | 3                                | 4                          | 17          |
|                                               |                                |                                |                                 |                                  |                                  | 4                                | 5                                | 10                               | 21                               | 40                               | 72                               | 46                               | 15                               | 5                                | 4                          | 18          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 12                               | 21                               | 16                               |                                  |                                  |                                  |                            | 19          |
|                                               |                                |                                |                                 |                                  | 2                                |                                  | 6                                | 2                                | 18                               | 5                                | 4                                |                                  |                                  |                                  |                            | 20          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 4                                | 20                               | 10                               | 3                                |                                  |                                  |                                  |                            | 21          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 8                                | 12                               | 3                                | 14                               |                                  |                                  |                            | 22          |
|                                               |                                |                                |                                 |                                  |                                  | 1                                | 2                                | 4                                | 14                               | 31                               | 3                                | 14                               |                                  |                                  |                            | 23          |
|                                               |                                |                                |                                 |                                  |                                  | 3                                | 6                                | 10                               | 7                                | 15                               | 12                               |                                  |                                  |                                  |                            | 24          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                | 2                                | 12                               | 10                               | 15                               | 7                                | 8                                |                                  |                                  |                            | 25          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                |                                  |                                  | 13                               | 7                                | 20                               | 16                               |                                  |                                  |                            | 26          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                | 1                                |                                  | 19                               | 7                                | 21                               | 16                               |                                  |                                  |                            | 27          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                | 3                                | 6                                | 25                               | 6                                | 21                               | 1                                |                                  |                                  |                            | 28          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                | 3                                | 8                                | 26                               | 9                                | 23                               | 1                                |                                  |                                  |                            | 29          |
|                                               |                                |                                |                                 |                                  |                                  | 1                                | 4                                | 5                                | 13                               | 6                                | 25                               | 9                                |                                  |                                  |                            | 30          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 4                                | 4                                |                                  |                                  |                                  |                                  |                                  |                                  |                            | 31          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 14                               | 2                                |                                  |                                  |                                  |                                  |                                  |                                  |                            | 32          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 6                                | 8                                | 4                                |                                  |                                  |                                  |                                  |                                  |                            | 33          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 34          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 7                                | 18                               | 8                                | 8                                | 9                                |                                  |                                  |                                  |                            | 35          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 3                                | 18                               | 15                               |                                  | 9                                |                                  |                                  |                                  |                            | 36          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 10                               | 16                               | 8                                | 8                                | 9                                |                                  |                                  |                                  |                            | 37          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 27                               | 6                                | 6                                | 3                                |                                  |                                  |                            | 38          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 23                               | 11                               | 4                                | 5                                |                                  |                                  |                            | 39          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 14                               | 23                               | 7                                |                                  |                                  |                                  |                            | 40          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 14                               | 26                               | 7                                |                                  |                                  |                                  |                            | 41          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 17                               | 13                               | 18                               |                                  |                                  |                                  |                            | 42          |
|                                               |                                |                                |                                 |                                  | 4                                |                                  | 2                                |                                  |                                  | 16                               | 2                                | 2                                |                                  |                                  |                            | 43          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 3                                | 2                                | 5                                | 1                                | 12                               |                                  |                                  |                                  |                            | 44          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                |                                  |                                  | 4                                | 10                               | 11                               |                                  |                                  |                                  |                            | 45          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                | 2                                | 2                                | 27                               | 2                                | 2                                |                                  |                            | 46          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                | 1                                | 18                               | 18                               | 2                                | 2                                |                                  |                            | 47          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 5                                |                                  | 8                                | 18                               | 2                                | 2                                |                                  |                            | 48          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 4                                | 4                                | 22                               | 6                                |                                  |                                  |                                  |                            | 49          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 4                                | 4                                | 2                                | 2                                |                                  |                                  |                                  |                            | 50          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 3                                | 1                                | 26                               | 4                                |                                  |                                  |                            | 51          |

TABLE O.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1907 TO 1915—

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Hook-ups, 16-inch—                |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 2        | Concluded.                        |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 3        | 13 plants.....                    | 1913  | 67                   | 56.9                              | \$0.297                         | \$17.08                            | 17                                             | 14                   | 6               |    | 30                   |    |                      |    |
| 4        |                                   | 1914  | 61                   | 57.4                              | .281                            | 16.00                              | 13                                             | 14                   | 6               |    | 28                   |    |                      |    |
| 5        | 19 plants.....                    | 1914  | 85                   | 59.1                              | .280                            | 16.43                              | 13                                             | 17                   | 4               |    | 51                   |    |                      |    |
| 6        |                                   | 1915  | 79                   | 60.7                              | .251                            | 15.29                              | 7                                              | 13                   | 5               |    | 54                   |    |                      |    |
| 7        | Hook-ups, 18-inch:                |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 8        | 2 plants.....                     | 1907  | 9                    | 62.2                              | .238                            | 14.83                              |                                                |                      | 1               |    | 8                    |    |                      |    |
| 9        |                                   | 1908  | 10                   | 61.0                              | .190                            | 11.64                              |                                                | 2                    |                 |    | 8                    |    |                      |    |
| 10       |                                   | 1909  | 10                   | 61.0                              | .202                            | 12.39                              |                                                | 2                    |                 |    | 8                    |    |                      |    |
| 11       |                                   | 1910  | 9                    | 60.8                              | .294                            | 18.13                              |                                                | 2                    |                 |    | 7                    |    |                      |    |
| 12       | 5 plants.....                     | 1910  | 20                   | 60.4                              | .227                            | 13.85                              |                                                | 4                    |                 | 6  | 10                   |    |                      |    |
| 13       |                                   | 1911  | 21                   | 60.5                              | .221                            | 13.48                              |                                                | 4                    | 3               |    | 14                   |    |                      |    |
| 14       |                                   | 1912  | 24                   | 59.2                              | .217                            | 12.93                              |                                                | 10                   |                 |    | 14                   |    |                      |    |
| 15       | 7 plants.....                     | 1912  | 38                   | 59.0                              | .258                            | 15.31                              |                                                | 12                   | 12              |    | 14                   |    |                      |    |
| 16       |                                   | 1913  | 40                   | 58.8                              | .281                            | 16.60                              |                                                | 14                   | 12              |    | 14                   |    |                      |    |
| 17       | 12 plants.....                    | 1913  | 51                   | 58.4                              | .280                            | 16.41                              |                                                | 19                   | 14              |    | 18                   |    |                      |    |
| 18       |                                   | 1914  | 51                   | 58.4                              | .261                            | 15.30                              |                                                | 19                   | 14              |    | 18                   |    |                      |    |
| 19       | 13 plants.....                    | 1914  | 58                   | 57.9                              | .264                            | 15.32                              |                                                | 22                   | 18              |    | 18                   |    |                      |    |
| 20       |                                   | 1915  | 55                   | 57.9                              | .268                            | 15.58                              | 6                                              | 13                   | 18              |    | 18                   |    |                      |    |
| 21       | Hook-ups, all sizes:              |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 22       | 12 plants.....                    | 1907  | 92                   | 63.9                              | .268                            | 17.30                              | 9                                              |                      | 3               | 8  | 48                   | 24 |                      |    |
| 23       |                                   | 1908  | 84                   | 65.3                              | .225                            | 14.70                              | 3                                              | 2                    | 2               | 14 | 35                   | 28 |                      |    |
| 24       |                                   | 1909  | 82                   | 65.7                              | .241                            | 15.82                              | 3                                              | 2                    | 2               | 8  | 47                   | 20 |                      |    |
| 25       |                                   | 1910  | 93                   | 65.6                              | .303                            | 20.06                              |                                                | 2                    | 2               | 12 | 59                   | 18 |                      |    |
| 26       | 20 plants.....                    | 1910  | 174                  | 63.2                              | .272                            | 17.13                              | 27                                             | 8                    | 2               | 20 | 74                   | 43 |                      |    |
| 27       |                                   | 1911  | 144                  | 63.4                              | .251                            | 15.81                              | 21                                             | 8                    | 7               | 9  | 63                   | 36 |                      |    |
| 28       | 21 plants.....                    | 1911  | 154                  | 63.0                              | .250                            | 15.66                              | 21                                             | 14                   | 7               | 9  | 67                   | 36 |                      |    |
| 29       |                                   | 1912  | 167                  | 62.2                              | .249                            | 15.56                              | 21                                             | 25                   | 4               | 14 | 68                   | 35 |                      |    |
| 30       | 22 plants.....                    | 1912  | 177                  | 61.9                              | .254                            | 15.74                              | 21                                             | 27                   | 16              | 14 | 64                   | 35 |                      |    |
| 31       |                                   | 1913  | 175                  | 61.4                              | .300                            | 18.27                              | 3                                              | 51                   | 16              | 7  | 75                   | 23 |                      |    |
| 32       | 36 plants.....                    | 1913  | 227                  | 59.6                              | .291                            | 17.32                              |                                                | 42                   | 63              |    | 110                  | 12 |                      |    |
| 33       |                                   | 1914  | 220                  | 59.7                              | .266                            | 15.89                              |                                                | 23                   | 112             |    | 73                   | 12 |                      |    |
| 34       | 47 plants.....                    | 1914  | 262                  | 59.8                              | .268                            | 16.03                              |                                                | 4                    | 121             |    | 137                  |    |                      |    |
| 35       |                                   | 1915  | 245                  | 60.3                              | .270                            | 16.25                              |                                                | 24                   | 77              |    | 144                  |    |                      |    |
| 36       | Roll hands, other, 8-inch:        |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 37       | 5 plants.....                     | 1907  | 20                   | 65.1                              | .250                            | 16.20                              |                                                | 2                    | 2               | 1  | 11                   | 4  |                      |    |
| 38       |                                   | 1908  | 20                   | 65.3                              | .237                            | 15.29                              |                                                | 2                    | 2               | 1  | 11                   | 4  |                      |    |
| 39       |                                   | 1909  | 20                   | 65.1                              | .235                            | 15.15                              |                                                | 2                    | 2               | 1  | 15                   |    |                      |    |
| 40       |                                   | 1910  | 20                   | 65.1                              | .257                            | 16.51                              |                                                | 1                    | 4               | 1  | 14                   |    |                      |    |
| 41       | 9 plants.....                     | 1910  | 33                   | 60.6                              | .251                            | 15.01                              | 6                                              | 3                    | 7               | 1  | 16                   |    |                      |    |
| 42       |                                   | 1911  | 33                   | 60.0                              | .253                            | 15.04                              | 6                                              | 3                    | 9               | 1  | 14                   |    |                      |    |
| 43       |                                   | 1912  | 33                   | 60.0                              | .248                            | 14.75                              | 6                                              | 4                    | 7               | 1  | 15                   |    |                      |    |
| 44       |                                   | 1913  | 36                   | 59.6                              | .284                            | 16.83                              |                                                | 16                   | 4               | 1  | 15                   |    |                      |    |
| 45       | 10 plants.....                    | 1913  | 37                   | 60.7                              | .298                            | 18.03                              |                                                | 12                   | 6               | 1  | 18                   |    |                      |    |
| 46       |                                   | 1914  | 39                   | 62.5                              | .257                            | 15.94                              |                                                | 10                   | 2               | 3  | 24                   |    |                      |    |
| 47       | 17 plants.....                    | 1914  | 52                   | 61.7                              | .250                            | 15.36                              |                                                | 17                   | 2               | 3  | 30                   |    |                      |    |
| 48       |                                   | 1915  | 51                   | 61.7                              | .260                            | 15.97                              | 6                                              | 8                    | 2               | 3  | 28                   | 4  |                      |    |
| 49       | Roll hands, other, 9-inch:        |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 50       | 3 plants.....                     | 1907  | 18                   | 59.7                              | .224                            | 12.91                              | 6                                              |                      |                 |    | 12                   |    |                      |    |
| 51       |                                   | 1908  | 18                   | 60.4                              | .223                            | 12.95                              | 6                                              |                      |                 |    | 12                   |    |                      |    |
| 52       |                                   | 1909  | 18                   | 60.3                              | .222                            | 12.90                              | 6                                              |                      |                 |    | 12                   |    |                      |    |
| 53       |                                   | 1910  | 18                   | 60.3                              | .234                            | 13.64                              | 6                                              |                      |                 |    | 12                   |    |                      |    |
| 54       | 6 plants.....                     | 1910  | 35                   | 56.5                              | .267                            | 14.49                              | 18                                             |                      |                 | 2  | 15                   |    |                      |    |
| 55       |                                   | 1911  | 35                   | 56.1                              | .242                            | 13.24                              | 18                                             | 2                    |                 |    | 15                   |    |                      |    |
| 56       |                                   | 1912  | 36                   | 56.3                              | .257                            | 14.05                              | 18                                             | 2                    |                 |    | 16                   |    |                      |    |
| 57       |                                   | 1913  | 36                   | 57.2                              | .275                            | 15.38                              | 6                                              | 13                   | 2               |    | 15                   |    |                      |    |

AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |    | Lino<br>No. |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|----|-------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |    |             |
|                                               |                                |                                |                                 |                                  |                                  | 2                                | 2                                | 3                                | 11                               | 6                                | 39                               | 4                                |                                  |                                  |                            | 1  |             |
|                                               |                                |                                |                                 |                                  |                                  | 2                                | 4                                | 5                                | 8                                | 14                               | 27                               | 1                                |                                  |                                  |                            | 2  |             |
|                                               |                                |                                |                                 |                                  | 1                                | 1                                | 3                                | 3                                | 14                               | 25                               | 34                               | 1                                |                                  |                                  |                            | 3  |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 35                               | 20                               | 15                               |                                  | 1                                |                                  |                            | 4  |             |
|                                               |                                |                                |                                 |                                  | 1                                | 3                                | 3                                |                                  | 3                                | 3                                |                                  |                                  |                                  |                                  |                            | 5  |             |
|                                               |                                |                                |                                 |                                  |                                  | 3                                | 1                                |                                  | 6                                |                                  |                                  |                                  |                                  |                                  |                            | 6  |             |
|                                               |                                |                                |                                 |                                  |                                  | 3                                | 2                                |                                  | 6                                |                                  |                                  |                                  |                                  |                                  |                            | 7  |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 1                                |                                  |                                  | 6                                |                                  |                                  |                                  |                            | 8  |             |
|                                               |                                |                                |                                 |                                  | 2                                | 3                                | 4                                | 3                                | 2                                |                                  | 6                                |                                  |                                  |                                  |                            | 9  |             |
|                                               |                                |                                |                                 | 2                                | 2                                | 4                                | 1                                | 3                                | 3                                |                                  | 6                                |                                  |                                  |                                  |                            | 10 |             |
|                                               |                                |                                |                                 |                                  | 2                                | 2                                | 4                                | 3                                | 7                                |                                  | 6                                |                                  |                                  |                                  |                            | 11 |             |
|                                               |                                |                                |                                 |                                  | 2                                | 2                                | 4                                | 3                                | 9                                |                                  | 18                               |                                  |                                  |                                  |                            | 12 |             |
|                                               |                                |                                |                                 |                                  |                                  | 2                                | 1                                | 4                                | 13                               |                                  | 18                               | 2                                |                                  |                                  |                            | 13 |             |
|                                               |                                |                                |                                 |                                  |                                  | 2                                |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 14 |             |
|                                               |                                |                                |                                 |                                  | 2                                | 2                                | 3                                | 3                                | 15                               | 9                                | 17                               | 2                                |                                  |                                  |                            | 15 |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 3                                | 5                                | 9                                | 14                               | 16                               |                                  |                                  |                                  |                            | 16 |             |
|                                               |                                |                                |                                 | 2                                | 2                                |                                  | 3                                | 5                                | 10                               | 19                               | 17                               |                                  |                                  |                                  |                            | 17 |             |
|                                               |                                |                                |                                 | 2                                |                                  | 2                                | 1                                | 5                                | 16                               | 13                               | 10                               | 6                                |                                  |                                  |                            | 18 |             |
|                                               |                                |                                |                                 |                                  | 4                                |                                  | 9                                | 4                                | 15                               | 40                               | 18                               | 2                                |                                  |                                  |                            | 19 |             |
|                                               |                                |                                |                                 |                                  | 1                                | 5                                | 23                               | 4                                | 29                               | 6                                | 16                               |                                  |                                  |                                  |                            | 20 |             |
|                                               |                                |                                |                                 |                                  |                                  | 5                                | 7                                | 6                                | 30                               | 20                               | 14                               |                                  |                                  |                                  |                            | 21 |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                | 11                               | 12                               | 14                               | 36                               | 16                               | 2                                |                                  |                            | 22 |             |
|                                               |                                |                                |                                 |                                  | 2                                | 4                                | 13                               | 27                               | 24                               | 41                               | 45                               | 16                               | 2                                |                                  |                            | 23 |             |
|                                               |                                |                                |                                 | 2                                | 2                                | 7                                | 10                               | 33                               | 25                               | 16                               | 45                               | 2                                | 2                                |                                  |                            | 24 |             |
|                                               |                                |                                |                                 | 2                                | 2                                | 7                                | 10                               | 36                               | 25                               | 23                               | 45                               | 2                                | 2                                |                                  |                            | 25 |             |
|                                               |                                |                                |                                 |                                  | 2                                | 4                                | 16                               | 35                               | 29                               | 45                               | 28                               | 8                                |                                  |                                  |                            | 26 |             |
|                                               |                                |                                |                                 |                                  | 2                                | 4                                | 16                               | 35                               | 31                               | 45                               | 36                               | 8                                |                                  |                                  |                            | 27 |             |
|                                               |                                |                                |                                 |                                  |                                  | 4                                | 1                                | 4                                | 56                               | 15                               | 70                               | 25                               |                                  |                                  |                            | 28 |             |
|                                               |                                |                                |                                 |                                  |                                  | 6                                | 6                                | 6                                | 68                               | 33                               | 81                               | 27                               |                                  |                                  |                            | 29 |             |
|                                               |                                |                                |                                 | 2                                | 2                                | 4                                | 10                               | 16                               | 56                               | 57                               | 71                               | 2                                |                                  |                                  |                            | 30 |             |
|                                               |                                |                                |                                 | 2                                | 2                                | 4                                | 10                               | 18                               | 64                               | 79                               | 81                               | 2                                |                                  |                                  |                            | 31 |             |
|                                               |                                |                                |                                 | 2                                | 1                                | 4                                | 8                                | 13                               | 81                               | 52                               | 68                               | 15                               | 1                                |                                  |                            | 32 |             |
|                                               |                                |                                |                                 |                                  |                                  | 2                                | 4                                | 2                                | 2                                | 3                                | 7                                |                                  |                                  |                                  |                            | 33 |             |
|                                               |                                |                                |                                 | 1                                | 2                                | 5                                | 1                                |                                  | 4                                | 3                                | 3                                | 2                                |                                  |                                  |                            | 34 |             |
|                                               |                                |                                |                                 |                                  | 2                                | 5                                | 1                                |                                  | 6                                | 1                                | 3                                | 2                                |                                  |                                  |                            | 35 |             |
|                                               |                                |                                |                                 |                                  | 2                                | 4                                |                                  |                                  | 2                                | 4                                | 3                                | 2                                | 1                                |                                  |                            | 36 |             |
|                                               |                                |                                |                                 | 2                                | 2                                | 4                                |                                  |                                  | 2                                | 10                               | 6                                | 2                                | 1                                |                                  |                            | 37 |             |
|                                               |                                |                                |                                 | 2                                | 2                                | 7                                |                                  | 1                                | 3                                | 8                                | 8                                | 2                                |                                  |                                  |                            | 38 |             |
|                                               |                                |                                |                                 | 3                                | 2                                | 1                                | 5                                | 1                                | 4                                | 9                                | 6                                | 1                                | 1                                |                                  |                            | 39 |             |
|                                               |                                |                                |                                 | 3                                | 3                                |                                  |                                  | 6                                | 1                                | 4                                | 15                               | 3                                | 1                                |                                  |                            | 40 |             |
|                                               |                                |                                |                                 | 1                                | 3                                |                                  |                                  | 6                                | 1                                | 8                                | 12                               | 5                                | 1                                |                                  |                            | 41 |             |
|                                               |                                |                                |                                 | 3                                | 1                                | 2                                |                                  | 6                                | 6                                | 4                                | 17                               |                                  |                                  |                                  |                            | 42 |             |
|                                               |                                |                                |                                 |                                  | 3                                |                                  |                                  | 6                                | 6                                | 6                                | 20                               |                                  |                                  |                                  |                            | 43 |             |
|                                               |                                |                                |                                 |                                  | 1                                | 5                                | 1                                | 10                               | 5                                | 6                                | 13                               | 3                                | 1                                |                                  |                            | 44 |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 6                                |                                  | 6                                | 2                                |                                  |                                  |                                  |                            | 45 |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 8                                | 2                                |                                  | 6                                | 2                                |                                  |                                  |                                  |                            | 46 |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 10                               |                                  |                                  | 6                                | 2                                |                                  |                                  |                                  |                            | 47 |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                | 8                                |                                  | 6                                | 2                                |                                  |                                  |                                  |                            | 48 |             |
|                                               |                                |                                |                                 |                                  |                                  | 2                                |                                  | 8                                | 2                                | 7                                | 11                               | 3                                |                                  |                                  |                            | 49 |             |
|                                               |                                |                                |                                 |                                  |                                  | 2                                |                                  | 10                               | 9                                | 6                                | 5                                | 2                                |                                  |                                  |                            | 50 |             |
|                                               |                                |                                |                                 |                                  |                                  | 2                                |                                  | 11                               | 2                                | 13                               | 5                                | 2                                | 2                                |                                  |                            | 51 |             |
|                                               |                                |                                |                                 |                                  |                                  | 1                                |                                  | 4                                | 3                                | 9                                | 9                                | 2                                | 2                                |                                  |                            |    |             |

TABLE O.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1907 TO 1915—

| Line No. | Occupation, and number of plants.                 | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |                 |                 |       |       |       |
|----------|---------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-----------------|-----------------|-------|-------|-------|
|          |                                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 and under 72 | 72 and under 84 | 84    |       |       |
| 1        | Roll hands, other, 9-inch—Concluded.              | 1913  | 34                   | 59.4                              | \$0.248                         | \$14.51                            | .....                                          | 11                   | 10              | .....           | 13              | ..... | ..... | ..... |
| 2        | 8 plants.....                                     | 1914  | 34                   | 59.4                              | .250                            | 14.61                              | .....                                          | 11                   | 10              | .....           | 13              | ..... | ..... | ..... |
| 3        | 9 plants.....                                     | 1914  | 36                   | 59.7                              | .250                            | 14.72                              | .....                                          | 11                   | 10              | .....           | 15              | ..... | ..... | ..... |
| 4        | .....                                             | 1915  | 36                   | 59.1                              | .245                            | 14.31                              | 6                                              | 5                    | 10              | .....           | 15              | ..... | ..... | ..... |
| 5        | Roll hands, other, 10-inch:                       |       |                      |                                   |                                 |                                    |                                                |                      |                 |                 |                 |       |       |       |
| 6        | 4 plants.....                                     | 1907  | 29                   | 70.4                              | .388                            | 27.24                              | .....                                          | .....                | .....           | 2               | 5               | 22    | ..... | ..... |
| 7        | .....                                             | 1908  | 29                   | 70.4                              | .327                            | 22.89                              | .....                                          | .....                | .....           | 2               | 5               | 22    | ..... | ..... |
| 8        | .....                                             | 1909  | 29                   | 70.0                              | .346                            | 24.04                              | .....                                          | .....                | .....           | 2               | 27              | ..... | ..... | ..... |
| 9        | .....                                             | 1910  | 29                   | 70.0                              | .409                            | 28.38                              | .....                                          | .....                | .....           | 1               | 28              | ..... | ..... | ..... |
| 10       | 7 plants.....                                     | 1910  | 39                   | 67.8                              | .359                            | 24.58                              | .....                                          | 4                    | .....           | 1               | 32              | 2     | ..... | ..... |
| 11       | .....                                             | 1911  | 39                   | 66.8                              | .327                            | 22.11                              | .....                                          | 6                    | .....           | 2               | 29              | 2     | ..... | ..... |
| 12       | .....                                             | 1912  | 39                   | 66.8                              | .351                            | 23.69                              | .....                                          | 6                    | .....           | 2               | 29              | 2     | ..... | ..... |
| 13       | 6 plants.....                                     | 1912  | 33                   | 66.0                              | .341                            | 22.72                              | .....                                          | 5                    | 2               | 2               | 24              | ..... | ..... | ..... |
| 14       | .....                                             | 1913  | 33                   | 66.0                              | .387                            | 25.95                              | .....                                          | 5                    | 2               | 2               | 24              | ..... | ..... | ..... |
| 15       | 6 plants.....                                     | 1913  | 30                   | 64.2                              | .377                            | 24.81                              | .....                                          | 5                    | 5               | 2               | 18              | ..... | ..... | ..... |
| 16       | .....                                             | 1914  | 30                   | 64.2                              | .372                            | 24.38                              | .....                                          | 5                    | 5               | 2               | 18              | ..... | ..... | ..... |
| 17       | 12 plants.....                                    | 1914  | 48                   | 63.0                              | .378                            | 24.13                              | .....                                          | 12                   | 4               | 3               | 29              | ..... | ..... | ..... |
| 18       | Roll hands, other, 12-inch:                       | 1915  | 49                   | 61.5                              | .367                            | 22.87                              | 6                                              | 6                    | 6               | 3               | 22              | 6     | ..... | ..... |
| 19       | 4 plants.....                                     | 1907  | 24                   | 70.1                              | .201                            | 14.04                              | .....                                          | .....                | .....           | .....           | 6               | 18    | ..... | ..... |
| 20       | .....                                             | 1908  | 21                   | 70.4                              | .194                            | 13.60                              | .....                                          | .....                | .....           | .....           | 5               | 16    | ..... | ..... |
| 21       | .....                                             | 1909  | 21                   | 70.3                              | .210                            | 14.75                              | .....                                          | .....                | .....           | .....           | 7               | 14    | ..... | ..... |
| 22       | .....                                             | 1910  | 22                   | 69.9                              | .302                            | 21.27                              | .....                                          | .....                | .....           | .....           | 8               | 14    | ..... | ..... |
| 23       | 9 plants.....                                     | 1910  | 33                   | 67.0                              | .285                            | 19.06                              | 3                                              | 2                    | .....           | .....           | 11              | 17    | ..... | ..... |
| 24       | .....                                             | 1911  | 32                   | 67.7                              | .254                            | 16.95                              | 3                                              | 1                    | .....           | .....           | 10              | 18    | ..... | ..... |
| 25       | .....                                             | 1912  | 33                   | 67.5                              | .298                            | 20.25                              | 3                                              | 1                    | .....           | .....           | 11              | 18    | ..... | ..... |
| 26       | 7 plants.....                                     | 1912  | 28                   | 67.5                              | .284                            | 19.20                              | 3                                              | .....                | .....           | .....           | 9               | 16    | ..... | ..... |
| 27       | .....                                             | 1913  | 28                   | 67.4                              | .304                            | 20.15                              | .....                                          | 3                    | .....           | .....           | 11              | 14    | ..... | ..... |
| 28       | 10 plants.....                                    | 1913  | 57                   | 68.8                              | .321                            | 22.04                              | .....                                          | 5                    | 1               | .....           | 11              | 40    | ..... | ..... |
| 29       | .....                                             | 1914  | 56                   | 68.9                              | .275                            | 18.97                              | .....                                          | 5                    | 1               | .....           | 10              | 40    | ..... | ..... |
| 30       | 11 plants.....                                    | 1914  | 58                   | 68.8                              | .272                            | 18.76                              | .....                                          | 5                    | 1               | .....           | 12              | 40    | ..... | ..... |
| 31       | Roll hands, other, 13-inch, 14-inch, and 15-inch: | 1915  | 53                   | 68.6                              | .297                            | 20.28                              | 3                                              | 1                    | 1               | .....           | 12              | 36    | ..... | ..... |
| 32       | 3 plants.....                                     | 1910  | 29                   | 62.1                              | .307                            | 17.94                              | 12                                             | .....                | .....           | .....           | 17              | ..... | ..... | ..... |
| 33       | .....                                             | 1911  | 28                   | 61.7                              | .268                            | 15.81                              | 12                                             | .....                | .....           | .....           | 16              | ..... | ..... | ..... |
| 34       | .....                                             | 1912  | 25                   | 63.4                              | .268                            | 16.17                              | 9                                              | .....                | .....           | .....           | 16              | ..... | ..... | ..... |
| 35       | .....                                             | 1913  | 19                   | 60.0                              | .335                            | 19.38                              | .....                                          | 9                    | .....           | .....           | 6               | 4     | ..... | ..... |
| 36       | 2 plants.....                                     | 1913  | 9                    | 60.9                              | .298                            | 17.51                              | .....                                          | 3                    | .....           | .....           | 6               | ..... | ..... | ..... |
| 37       | .....                                             | 1914  | 9                    | 60.9                              | .251                            | 14.97                              | .....                                          | 3                    | .....           | .....           | 6               | ..... | ..... | ..... |
| 38       | 3 plants.....                                     | 1914  | 11                   | 60.9                              | .257                            | 15.42                              | .....                                          | 3                    | .....           | .....           | 8               | ..... | ..... | ..... |
| 39       | Roll hands, other, 16-inch:                       | 1915  | 11                   | 59.6                              | .261                            | 15.30                              | 3                                              | .....                | .....           | .....           | 8               | ..... | ..... | ..... |
| 40       | 2 plants.....                                     | 1907  | 4                    | 64.5                              | .331                            | 21.26                              | .....                                          | .....                | .....           | 1               | 3               | ..... | ..... | ..... |
| 41       | .....                                             | 1908  | 4                    | 64.5                              | .331                            | 21.21                              | .....                                          | .....                | .....           | 1               | 3               | ..... | ..... | ..... |
| 42       | .....                                             | 1909  | 4                    | 64.5                              | .359                            | 22.97                              | .....                                          | .....                | .....           | 1               | 3               | ..... | ..... | ..... |
| 43       | .....                                             | 1910  | 4                    | 64.5                              | .374                            | 24.13                              | .....                                          | .....                | .....           | 1               | 3               | ..... | ..... | ..... |
| 44       | .....                                             | 1911  | 4                    | 64.5                              | .398                            | 25.63                              | .....                                          | .....                | .....           | 1               | 3               | ..... | ..... | ..... |
| 45       | .....                                             | 1912  | 3                    | 64.5                              | .394                            | 25.51                              | .....                                          | .....                | .....           | 1               | 2               | ..... | ..... | ..... |
| 46       | 1 plant.....                                      | 1912  | 6                    | 64.5                              | .350                            | 22.59                              | .....                                          | .....                | .....           | 1               | 5               | ..... | ..... | ..... |
| 47       | .....                                             | 1913  | 6                    | 64.5                              | .408                            | 26.36                              | .....                                          | .....                | .....           | 1               | 5               | ..... | ..... | ..... |
| 48       | 3 plants.....                                     | 1913  | 16                   | 64.5                              | .342                            | 22.06                              | .....                                          | .....                | .....           | 1               | 15              | ..... | ..... | ..... |
| 49       | .....                                             | 1914  | 15                   | 64.5                              | .232                            | 15.00                              | .....                                          | .....                | .....           | 1               | 14              | ..... | ..... | ..... |
| 50       | 5 plants.....                                     | 1914  | 19                   | 65.1                              | .245                            | 16.03                              | .....                                          | .....                | .....           | 1               | 17              | 1     | ..... | ..... |
|          | .....                                             | 1915  | 19                   | 65.1                              | .246                            | 16.10                              | .....                                          | .....                | .....           | 1               | 17              | 1     | ..... | ..... |

AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                |                                |                                 |                                  | 4                                | 2                                | 4                                | 8                                | 4                                | 3                                | 5                                | 2                                |                                  |                                  |                            | 1           |
|                                               |                                |                                |                                 |                                  |                                  | 6                                | 3                                | 11                               | 3                                |                                  | 7                                | 2                                | 2                                |                                  |                            | 2           |
|                                               |                                |                                |                                 |                                  |                                  | 6                                | 3                                | 11                               | 3                                | 2                                | 7                                | 2                                | 2                                |                                  |                            | 3           |
|                                               |                                |                                |                                 | 1                                | 1                                | 6                                | 2                                | 8                                | 7                                | 3                                | 6                                |                                  |                                  | 2                                |                            | 4           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                |                                  | 22                               | 1                                | 5                                |                                  |                            | 5           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 12                               | 5                                | 5                                | 3                                | 4                                |                                  |                            | 6           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 15                               | 6                                | 3                                | 3                                | 1                                |                            | 7           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 17                               | 4                                | 2                                | 2                                |                            | 8           |
|                                               |                                |                                |                                 |                                  |                                  | 4                                |                                  | 2                                |                                  | 6                                | 17                               | 4                                | 2                                | 2                                | 2                          | 9           |
|                                               |                                |                                |                                 |                                  |                                  | 1                                | 1                                | 6                                |                                  | 16                               | 5                                | 6                                | 1                                | 3                                |                            | 10          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 1                                | 1                                | 5                                | 16                               | 4                                | 8                                |                                  | 2                                | 2                          | 11          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 1                                | 1                                | 5                                | 14                               | 4                                | 4                                |                                  | 2                                | 2                          | 12          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 4                                | 2                                |                                  | 18                               | 3                                | 2                                | 1                                | 3                          | 13          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                | 4                                | 2                                | 1                                | 12                               | 3                                | 2                                | 1                                | 3                          | 14          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                | 4                                |                                  | 5                                | 13                               |                                  | 3                                | 1                                | 2                          | 15          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 4                                | 2                                | 7                                | 25                               | 2                                | 5                                | 1                                | 2                          | 16          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 4                                |                                  | 3                                | 7                                | 19                               | 8                                | 6                                |                                  | 2                          | 17          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 14                               | 4                                | 4                                |                                  |                                  | 2                                |                                  |                                  |                            | 18          |
|                                               |                                |                                |                                 |                                  |                                  | 12                               |                                  | 2                                | 5                                |                                  |                                  | 2                                |                                  |                                  |                            | 19          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 16                               | 3                                |                                  | 2                                |                                  |                                  |                                  |                            | 20          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                | 6                                |                                  | 12                               |                                  | 2                                |                                  |                            | 21          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 7                                | 8                                | 1                                | 15                               |                                  | 2                                |                                  |                            | 22          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                | 4                                | 20                               | 1                                | 1                                | 4                                |                                  |                                  |                            | 23          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                | 9                                | 1                                | 17                               |                                  |                                  | 2                                |                            | 24          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                |                                  | 8                                | 1                                | 17                               |                                  |                                  |                                  |                            | 25          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                | 6                                | 2                                | 15                               |                                  | 3                                |                                  |                            | 26          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                | 4                                | 19                               | 27                               |                                  | 3                                | 2                                |                            | 27          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                | 19                               | 31                               | 2                                |                                  | 2                                |                                  |                            | 28          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 3                                | 20                               | 31                               | 2                                |                                  | 2                                |                                  |                            | 29          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 6                                | 3                                | 24                               | 15                               | 2                                | 3                                |                                  |                            | 30          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 10                               |                                  | 5                                | 2                                | 12                               |                                  |                                  |                            | 31          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 10                               |                                  | 1                                | 5                                | 12                               |                                  |                                  |                                  |                            | 32          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 4                                |                                  | 6                                | 9                                |                                  |                                  |                                  |                            | 33          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 4                                |                                  | 4                                | 4                                | 7                                |                                  |                                  |                            | 34          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 4                                |                                  |                                  | 3                                | 2                                |                                  |                                  |                            | 35          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 4                                |                                  | 4                                | 1                                |                                  |                                  |                                  |                            | 36          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 4                                |                                  | 6                                | 1                                |                                  |                                  |                                  |                            | 37          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 4                                |                                  | 4                                | 5                                |                                  |                                  |                                  |                            | 38          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 1                                | 1                                |                                  |                                  |                            | 39          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 1                                | 1                                |                                  |                                  |                            | 40          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  | 1                                |                                  |                            | 41          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  | 1                                | 1                                |                                  |                            | 42          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  | 1                                | 1                                |                                  |                            | 43          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  | 2                                |                                  |                                  |                            | 44          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                |                                  | 2                                |                                  |                                  |                            | 45          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                |                                  | 2                                |                                  |                            | 46          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 4                                |                                  | 10                               |                                  |                                  | 2                                |                                  |                            | 47          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                | 6                                |                                  | 5                                | 2                                |                                  |                                  |                                  |                            | 48          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                | 6                                | 2                                | 6                                | 2                                | 1                                |                                  |                                  |                            | 49          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 3                                | 11                               | 2                                | 2                                | 1                                |                                  |                                  |                            | 50          |

TABLE O.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1907 TO 1915—

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
|          | Roll hands, other, 18-inch:       |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 1        | 1 plant.....                      | 1907  | 2                    | 62.8                              | \$0.237                         | \$14.84                            |                                                |                      |                 |    | 2                    |    |                      |    |
| 2        |                                   | 1908  | 2                    | 62.8                              | .181                            | 11.33                              |                                                |                      |                 |    | 2                    |    |                      |    |
| 3        |                                   | 1909  | 2                    | 62.8                              | .200                            | 12.55                              |                                                |                      |                 |    | 2                    |    |                      |    |
| 4        |                                   | 1910  | 2                    | 62.8                              | .296                            | 18.57                              |                                                |                      |                 |    | 2                    |    |                      |    |
| 5        | 4 plants.....                     | 1910  | 7                    | 59.9                              | .226                            | 13.67                              |                                                | 2                    |                 | 2  | 3                    |    |                      |    |
| 6        |                                   | 1911  | 6                    | 60.8                              | .256                            | 15.55                              |                                                | 1                    | 1               |    | 4                    |    |                      |    |
| 7        |                                   | 1912  | 7                    | 59.2                              | .235                            | 13.91                              |                                                | 3                    |                 |    | 4                    |    |                      |    |
| 8        | 5 plants.....                     | 1912  | 9                    | 59.3                              | .309                            | 18.35                              |                                                | 3                    | 2               |    | 4                    |    |                      |    |
| 9        |                                   | 1913  | 10                   | 58.9                              | .344                            | 20.41                              |                                                | 4                    | 2               |    | 4                    |    |                      |    |
| 10       | 6 plants.....                     | 1913  | 16                   | 55.8                              | .353                            | 19.57                              |                                                | 10                   | 2               |    | 4                    |    |                      |    |
| 11       |                                   | 1914  | 15                   | 55.9                              | .305                            | 17.09                              |                                                | 9                    | 2               |    | 4                    |    |                      |    |
| 12       | 7 plants.....                     | 1914  | 16                   | 55.9                              | .312                            | 17.47                              |                                                | 9                    | 3               |    | 4                    |    |                      |    |
| 13       |                                   | 1915  | 16                   | 55.1                              | .321                            | 17.76                              | 6                                              | 3                    | 3               |    | 4                    |    |                      |    |
|          | Roll hands, other, all sizes:     |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 14       | 9 plants.....                     | 1907  | 97                   | 66.8                              | .278                            | 18.53                              | 6                                              | 2                    | 2               | 4  | 39                   | 44 |                      |    |
| 15       |                                   | 1908  | 94                   | 67.0                              | .255                            | 16.97                              | 6                                              | 2                    | 2               | 4  | 38                   | 42 |                      |    |
| 16       |                                   | 1909  | 94                   | 66.8                              | .266                            | 17.65                              | 6                                              | 2                    | 2               | 4  | 66                   | 14 |                      |    |
| 17       |                                   | 1910  | 95                   | 66.7                              | .315                            | 21.06                              | 6                                              | 1                    | 4               | 3  | 67                   | 14 |                      |    |
| 18       | 18 plants.....                    | 1910  | 180                  | 62.8                              | .295                            | 18.35                              | 39                                             | 11                   | 7               | 7  | 80                   | 36 |                      |    |
| 19       |                                   | 1911  | 177                  | 62.5                              | .273                            | 16.97                              | 39                                             | 13                   | 10              | 4  | 75                   | 36 |                      |    |
| 20       |                                   | 1912  | 176                  | 62.7                              | .287                            | 17.97                              | 36                                             | 16                   | 7               | 4  | 77                   | 36 |                      |    |
| 21       | 18 plants.....                    | 1912  | 170                  | 62.2                              | .284                            | 17.56                              | 36                                             | 14                   | 11              | 4  | 73                   | 32 |                      |    |
| 22       |                                   | 1913  | 168                  | 61.8                              | .320                            | 19.71                              | 6                                              | 50                   | 10              | 4  | 80                   | 18 |                      |    |
| 23       | 24 plants.....                    | 1913  | 199                  | 63.2                              | .316                            | 20.02                              |                                                | 29                   | 19              |    | 151                  |    |                      |    |
| 24       |                                   | 1914  | 198                  | 63.6                              | .280                            | 17.82                              |                                                | 29                   | 18              |    | 151                  |    |                      |    |
| 25       | 37 plants.....                    | 1914  | 240                  | 63.2                              | .285                            | 17.92                              |                                                | 33                   | 18              |    | 189                  |    |                      |    |
| 26       |                                   | 1915  | 235                  | 62.6                              | .291                            | 18.23                              |                                                | 33                   | 27              |    | 175                  |    |                      |    |
|          | Hotbed men:                       |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 27       | 15 plants.....                    | 1907  | 302                  | 63.3                              | .189                            | 11.98                              | 12                                             | 8                    | 54              | 42 | 130                  | 56 |                      |    |
| 28       |                                   | 1908  | 299                  | 63.2                              | .174                            | 10.93                              | 12                                             | 12                   | 52              | 57 | 104                  | 62 |                      |    |
| 29       |                                   | 1909  | 286                  | 63.3                              | .180                            | 11.00                              | 12                                             | 12                   | 52              | 42 | 154                  | 14 |                      |    |
| 30       |                                   | 1910  | 302                  | 63.3                              | .208                            | 13.02                              | 15                                             | 12                   | 45              | 47 | 163                  | 20 |                      |    |
| 31       | 25 plants.....                    | 1910  | 500                  | 62.9                              | .200                            | 12.46                              | 57                                             | 32                   | 48              | 71 | 216                  | 59 | 17                   |    |
| 32       |                                   | 1911  | 434                  | 62.0                              | .189                            | 11.69                              | 54                                             | 39                   | 63              | 29 | 207                  | 42 |                      |    |
| 33       | 26 plants.....                    | 1911  | 450                  | 61.9                              | .188                            | 11.61                              | 54                                             | 45                   | 63              | 29 | 217                  | 42 |                      |    |
| 34       |                                   | 1912  | 461                  | 61.7                              | .192                            | 11.80                              | 54                                             | 61                   | 60              | 25 | 209                  | 52 |                      |    |
| 35       | 26 plants.....                    | 1912  | 455                  | 61.5                              | .192                            | 11.73                              | 54                                             | 54                   | 82              | 25 | 194                  | 46 |                      |    |
| 36       |                                   | 1913  | 467                  | 60.9                              | .221                            | 13.43                              | 12                                             | 110                  | 75              | 13 | 233                  | 24 |                      |    |
| 37       | 43 plants.....                    | 1913  | 600                  | 60.3                              | .217                            | 13.06                              | 39                                             | 139                  | 118             | 13 | 267                  | 24 |                      |    |
| 38       |                                   | 1914  | 573                  | 60.6                              | .209                            | 12.61                              | 35                                             | 145                  | 81              | 13 | 271                  | 28 |                      |    |
| 39       | 56 plants.....                    | 1914  | 714                  | 60.3                              | .213                            | 12.77                              | 35                                             | 200                  | 102             | 13 | 338                  | 26 |                      |    |
| 40       |                                   | 1915  | 721                  | 60.0                              | .216                            | 12.83                              | 104                                            | 133                  | 115             |    | 312                  | 57 |                      |    |
|          | Shearmen:                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 41       | 15 plants.....                    | 1907  | 94                   | 64.8                              | .249                            | 16.20                              |                                                | 6                    | 8               | 15 | 48                   | 17 |                      |    |
| 42       |                                   | 1908  | 92                   | 65.1                              | .216                            | 14.10                              |                                                | 6                    | 8               | 17 | 42                   | 19 |                      |    |
| 43       |                                   | 1909  | 93                   | 65.3                              | .225                            | 14.72                              |                                                | 6                    | 8               | 17 | 55                   | 3  | 4                    |    |
| 44       |                                   | 1910  | 97                   | 65.0                              | .247                            | 16.11                              |                                                | 6                    | 7               | 18 | 60                   | 6  |                      |    |
| 45       | 25 plants.....                    | 1910  | 156                  | 63.3                              | .264                            | 16.40                              | 15                                             | 18                   | 7               | 22 | 72                   | 16 | 6                    |    |
| 46       |                                   | 1911  | 151                  | 62.5                              | .254                            | 15.55                              | 15                                             | 16                   | 18              | 18 | 68                   | 16 |                      |    |
| 47       |                                   | 1912  | 154                  | 62.4                              | .254                            | 15.59                              | 15                                             | 18                   | 19              | 19 | 63                   | 18 | 2                    |    |
| 48       | 24 plants.....                    | 1912  | 156                  | 62.4                              | .251                            | 15.40                              |                                                | 19                   | 19              | 16 | 67                   | 18 | 2                    |    |
| 49       |                                   | 1913  | 159                  | 62.0                              | .287                            | 17.54                              |                                                | 40                   | 17              | 13 | 83                   | 4  | 2                    |    |
| 50       | 41 plants.....                    | 1913  | 218                  | 60.2                              | .281                            | 16.74                              | 11                                             | 59                   | 32              | 20 | 89                   | 5  | 2                    |    |
| 51       |                                   | 1914  | 205                  | 60.3                              | .270                            | 16.08                              | 10                                             | 54                   | 26              | 21 | 85                   | 9  |                      |    |
| 52       | 54 plants.....                    | 1914  | 263                  | 60.5                              | .280                            | 16.78                              | 10                                             | 68                   | 32              | 24 | 120                  | 9  |                      |    |
| 53       |                                   | 1915  | 264                  | 60.5                              | .293                            | 17.56                              | 28                                             | 47                   | 36              | 17 | 123                  | 13 |                      |    |



AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                |                                  |                                  |                                  |                                  |                            | 1           |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 1                                | 1                                | 1                                |                                  |                                  |                                  |                                  |                                  |                            | 2           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                                  |                                  |                            | 3           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 4                                | 1                                | 2                                |                                  |                                  |                                  |                                  |                            | 4           |
|                                               |                                |                                |                                 |                                  |                                  | 1                                | 1                                |                                  | 1                                | 1                                | 2                                |                                  |                                  |                                  |                            | 5           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 4                                | 3                                |                                  |                                  |                                  |                                  |                            | 6           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 3                                |                                  |                                  |                                  |                                  |                            | 7           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 4                                | 3                                |                                  |                                  |                                  | 2                                |                            | 8           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 3                                | 3                                |                                  | 2                                |                                  |                            | 9           |
|                                               |                                |                                |                                 |                                  | 2                                |                                  |                                  | 2                                | 2                                | 2                                | 6                                | 2                                | 1                                | 1                                |                            | 10          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 5                                | 4                                |                                  | 2                                |                                  |                            | 11          |
|                                               |                                |                                |                                 |                                  | 2                                |                                  |                                  |                                  | 2                                | 5                                | 4                                | 1                                | 2                                |                                  |                            | 12          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                |                                  |                                  | 2                                | 2                                | 5                                | 5                                |                                  |                                  |                            | 13          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 14          |
|                                               |                                |                                |                                 | 1                                | 2                                |                                  | 26                               | 8                                | 8                                | 12                               | 32                               | 4                                | 5                                |                                  |                            | 15          |
|                                               |                                |                                |                                 |                                  | 2                                |                                  | 19                               | 9                                | 3                                | 21                               | 16                               | 11                               | 8                                | 4                                |                            | 16          |
|                                               |                                |                                |                                 |                                  | 2                                |                                  | 5                                | 11                               | 17                               | 11                               | 24                               | 14                               | 5                                | 4                                | 1                          | 17          |
|                                               |                                |                                |                                 |                                  | 2                                |                                  | 2                                | 6                                | 10                               | 8                                | 16                               | 34                               | 7                                | 6                                | 2                          | 18          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                | 10                               | 6                                | 31                               | 33                               | 51                               | 22                               | 6                                | 2                                | 2                          | 19          |
|                                               |                                |                                |                                 |                                  | 2                                | 2                                | 5                                | 31                               | 11                               | 34                               | 39                               | 15                               | 2                                | 3                                |                            | 20          |
|                                               |                                |                                |                                 |                                  | 3                                | 4                                | 2                                | 29                               | 4                                | 24                               | 49                               | 41                               | 11                               | 3                                | 4                          | 21          |
|                                               |                                |                                |                                 |                                  | 3                                | 4                                | 2                                | 29                               | 2                                | 23                               | 50                               | 41                               | 7                                | 5                                | 2                          | 22          |
|                                               |                                |                                |                                 |                                  | 3                                | 3                                |                                  | 4                                | 24                               | 13                               | 22                               | 68                               | 15                               | 12                               | 1                          | 23          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 24          |
|                                               |                                |                                |                                 |                                  | 1                                | 7                                | 2                                | 6                                | 26                               | 17                               | 33                               | 75                               | 14                               | 11                               | 4                          | 25          |
|                                               |                                |                                |                                 |                                  | 3                                | 3                                | 8                                | 7                                | 33                               | 30                               | 54                               | 46                               | 2                                | 9                                | 1                          | 26          |
|                                               |                                |                                |                                 |                                  | 3                                | 3                                | 11                               | 6                                | 38                               | 35                               | 63                               | 61                               | 6                                | 11                               | 1                          | 27          |
|                                               |                                |                                |                                 |                                  | 1                                | 6                                | 9                                | 12                               | 32                               | 31                               | 46                               | 65                               | 19                               | 10                               | 2                          | 28          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 29          |
|                                               |                                |                                |                                 |                                  | 14                               | 4                                | 108                              | 47                               | 32                               | 60                               | 17                               | 20                               |                                  |                                  |                            | 30          |
|                                               |                                |                                | 6                               | 4                                | 2                                | 15                               | 116                              | 64                               | 37                               | 35                               | 13                               | 7                                |                                  |                                  |                            | 31          |
|                                               |                                |                                | 6                               | 8                                | 6                                | 38                               | 70                               | 53                               | 33                               | 54                               | 9                                | 15                               |                                  |                                  |                            | 32          |
|                                               |                                |                                | 6                               | 6                                | 10                               | 38                               | 87                               | 36                               | 58                               | 36                               | 4                                | 19                               | 2                                |                                  |                            | 33          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 34          |
|                                               |                                |                                |                                 | 6                                | 18                               | 28                               | 78                               | 127                              | 71                               | 83                               | 57                               | 11                               | 19                               | 2                                |                            | 35          |
|                                               |                                |                                |                                 | 23                               | 27                               | 78                               | 125                              | 59                               | 65                               | 27                               | 24                               | 4                                | 2                                |                                  |                            | 36          |
|                                               |                                |                                |                                 | 23                               | 27                               | 90                               | 125                              | 63                               | 65                               | 27                               | 24                               | 4                                | 2                                |                                  |                            | 37          |
|                                               |                                |                                | 3                               | 5                                | 19                               | 30                               | 42                               | 130                              | 69                               | 101                              | 38                               | 24                               |                                  |                                  |                            | 38          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 39          |
|                                               |                                |                                | 3                               | 5                                | 17                               | 22                               | 42                               | 138                              | 73                               | 99                               | 34                               | 22                               |                                  |                                  |                            | 40          |
|                                               |                                |                                | 3                               | 2                                | 5                                | 8                                | 21                               | 27                               | 132                              | 168                              | 61                               | 27                               | 10                               |                                  |                            | 41          |
|                                               |                                |                                | 3                               | 3                                | 2                                | 11                               | 12                               | 47                               | 50                               | 127                              | 79                               | 35                               | 10                               |                                  |                            | 42          |
|                                               |                                |                                | 3                               | 3                                | 2                                | 12                               | 10                               | 48                               | 69                               | 126                              | 182                              | 95                               | 23                               |                                  |                            | 43          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 44          |
|                                               |                                |                                | 3                               | 3                                | 2                                | 10                               | 12                               | 56                               | 88                               | 135                              | 248                              | 125                              | 32                               |                                  |                            | 45          |
|                                               |                                |                                | 3                               | 3                                | 14                               | 8                                | 40                               | 86                               | 145                              | 269                              | 100                              | 37                               | 16                               |                                  |                            | 46          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 47          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 48          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 49          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 50          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 51          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 52          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 53          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 54          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 55          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 56          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 57          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 58          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 59          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 60          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 61          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 62          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 63          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 64          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 65          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 66          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 67          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 68          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 69          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 70          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 71          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 72          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 73          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 74          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 75          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 76          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 77          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 78          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 79          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 80          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 81          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 82          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 83          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 84          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 85          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 86          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 87          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 88          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 89          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 90          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 91          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 92          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 93          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 94          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 95          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 96          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 97          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 98          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 99          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 100         |

TABLE O.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1907 TO 1915—

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                       |                  |       |                       |       |                       |       |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|-----------------------|------------------|-------|-----------------------|-------|-----------------------|-------|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56. | 56 and under 60. | 60.   | Over 60 and under 72. | 72.   | Over 72 and under 84. | 84.   |
| 1        | Shearmen's helpers:               | 1907  | 201                  | 65.9                              | \$0.174                         | \$11.46                            | .....                                          | 8                     | 4                | 21    | 125                   | 41    | 2                     | ..... |
| 2        | 15 plants.....                    | 1908  | 172                  | 66.2                              | .168                            | 11.07                              | .....                                          | 8                     | 4                | 22    | 101                   | 29    | 8                     | ..... |
| 3        |                                   | 1909  | 185                  | 67.3                              | .169                            | 11.32                              | .....                                          | 8                     | 4                | 26    | 110                   | 8     | 29                    | ..... |
| 4        |                                   | 1910  | 215                  | 65.3                              | .184                            | 12.00                              | .....                                          | 8                     | 3                | 39    | 140                   | 25    | .....                 | ..... |
| 5        | 23 plants.....                    | 1910  | 355                  | 64.7                              | .187                            | 12.02                              | 45                                             | 8                     | 3                | 43    | 158                   | 77    | 21                    | ..... |
| 6        |                                   | 1911  | 359                  | 63.8                              | .178                            | 11.28                              | 48                                             | 8                     | 20               | 37    | 181                   | 65    | .....                 | ..... |
| 7        |                                   | 1912  | 358                  | 63.9                              | .184                            | 11.74                              | 48                                             | 12                    | 20               | 35    | 166                   | 65    | 12                    | ..... |
| 8        | 22 plants.....                    | 1912  | 337                  | 63.4                              | .183                            | 11.52                              | 51                                             | 14                    | 20               | 34    | 158                   | 48    | 12                    | ..... |
| 9        |                                   | 1913  | 316                  | 62.8                              | .214                            | 13.30                              | .....                                          | 69                    | 17               | 22    | 194                   | 4     | 10                    | ..... |
| 10       | 35 plants.....                    | 1913  | 418                  | 62.7                              | .209                            | 12.98                              | 18                                             | 70                    | 29               | 23    | 256                   | 12    | 10                    | ..... |
| 11       |                                   | 1914  | 377                  | 62.9                              | .198                            | 12.43                              | 15                                             | 53                    | 28               | 23    | 232                   | 26    | .....                 | ..... |
| 12       | 48 plants.....                    | 1914  | 487                  | 62.7                              | .201                            | 12.57                              | 15                                             | 77                    | 38               | 27    | 306                   | 24    | .....                 | ..... |
| 13       |                                   | 1915  | 471                  | 62.3                              | .203                            | 12.66                              | 45                                             | 50                    | 42               | 18    | 281                   | 35    | .....                 | ..... |
| 14       | Bundlers:                         | 1907  | 41                   | 66.9                              | .202                            | 13.53                              | .....                                          | .....                 | .....            | ..... | 31                    | 10    | .....                 | ..... |
| 15       | 5 plants.....                     | 1908  | 41                   | 66.9                              | .174                            | 11.68                              | .....                                          | .....                 | .....            | ..... | 31                    | 10    | .....                 | ..... |
| 16       |                                   | 1909  | 41                   | 66.8                              | .186                            | 12.42                              | .....                                          | .....                 | .....            | ..... | 41                    | ..... | .....                 | ..... |
| 17       |                                   | 1910  | 41                   | 67.1                              | .213                            | 14.23                              | .....                                          | .....                 | .....            | ..... | 41                    | ..... | .....                 | ..... |
| 18       | 6 plants.....                     | 1910  | 77                   | 66.1                              | .207                            | 13.69                              | .....                                          | .....                 | .....            | ..... | 77                    | ..... | .....                 | ..... |
| 19       |                                   | 1911  | 81                   | 63.5                              | .193                            | 12.28                              | .....                                          | .....                 | 36               | ..... | 45                    | ..... | .....                 | ..... |
| 20       | 7 plants.....                     | 1911  | 131                  | 62.0                              | .197                            | 12.20                              | .....                                          | .....                 | 86               | ..... | 45                    | ..... | .....                 | ..... |
| 21       |                                   | 1912  | 132                  | 62.0                              | .193                            | 11.94                              | .....                                          | .....                 | 86               | ..... | 46                    | ..... | .....                 | ..... |
| 22       | 7 plants.....                     | 1912  | 129                  | 61.6                              | .194                            | 11.96                              | .....                                          | .....                 | 90               | 1     | 38                    | ..... | .....                 | ..... |
| 23       |                                   | 1913  | 136                  | 61.4                              | .228                            | 14.05                              | .....                                          | .....                 | 97               | 1     | 38                    | ..... | .....                 | ..... |
| 24       | 12 plants.....                    | 1913  | 178                  | 61.4                              | .218                            | 13.38                              | 4                                              | 123                   | 3                | 48    | .....                 | ..... | .....                 | ..... |
| 25       |                                   | 1914  | 168                  | 64.1                              | .203                            | 13.00                              | 4                                              | 69                    | 3                | 92    | .....                 | ..... | .....                 | ..... |
| 26       | 13 plants.....                    | 1914  | 178                  | 63.9                              | .203                            | 12.97                              | 8                                              | 69                    | 3                | 98    | .....                 | ..... | .....                 | ..... |
| 27       |                                   | 1915  | 210                  | 64.4                              | .208                            | 13.38                              | 6                                              | 72                    | 2                | 122   | 8                     | ..... | .....                 | ..... |
| 28       | Laborers:                         | 1907  | 296                  | 68.3                              | .153                            | 10.44                              | .....                                          | .....                 | 1                | 51    | 140                   | 74    | 24                    | 6     |
| 29       | 10 plants.....                    | 1908  | 227                  | 64.8                              | .153                            | 9.93                               | .....                                          | .....                 | 2                | 94    | 108                   | 18    | .....                 | 5     |
| 30       |                                   | 1909  | 324                  | 67.8                              | .150                            | 10.17                              | .....                                          | .....                 | 2                | 76    | 137                   | 88    | 13                    | 8     |
| 31       |                                   | 1910  | 424                  | 67.2                              | .161                            | 10.81                              | .....                                          | .....                 | 9                | 119   | 113                   | 176   | .....                 | 7     |
| 32       | 15 plants.....                    | 1910  | 511                  | 67.8                              | .160                            | 10.86                              | .....                                          | .....                 | 9                | 149   | 128                   | 183   | 24                    | 18    |
| 33       |                                   | 1911  | 355                  | 66.0                              | .160                            | 10.59                              | 31                                             | 3                     | 70               | 175   | 70                    | 4     | 2                     | ..... |
| 34       | 17 plants.....                    | 1911  | 390                  | 65.5                              | .159                            | 10.40                              | .....                                          | 31                    | 3                | 104   | 175                   | 71    | 4                     | 2     |
| 35       |                                   | 1912  | 424                  | 65.9                              | .159                            | 10.52                              | 18                                             | 41                    | 69               | 204   | 84                    | 5     | 3                     | ..... |
| 36       | 21 plants.....                    | 1912  | 536                  | 65.0                              | .160                            | 10.38                              | .....                                          | 35                    | 87               | 79    | 229                   | 98    | 5                     | 3     |
| 37       |                                   | 1913  | 705                  | 64.3                              | .178                            | 11.51                              | 43                                             | 115                   | 164              | 310   | 25                    | 44    | 4                     | ..... |
| 38       | 42 plants.....                    | 1913  | 891                  | 62.5                              | .169                            | 10.66                              | 1                                              | 83                    | 150              | 292   | 297                   | 20    | 44                    | 4     |
| 39       |                                   | 1914  | 796                  | 63.6                              | .168                            | 10.75                              | 1                                              | 42                    | 90               | 286   | 301                   | 58    | 14                    | 4     |
| 40       | 54 plants.....                    | 1914  | 1,039                | 63.3                              | .173                            | 11.00                              | 7                                              | 67                    | 118              | 318   | 437                   | 72    | 14                    | 6     |
| 41       |                                   | 1915  | 1,029                | 62.9                              | .173                            | 10.91                              | 10                                             | 77                    | 145              | 282   | 427                   | 79    | 6                     | 3     |
| 42       | Unclassified—productive:          | 1914  | 392                  | 63.6                              | .201                            | 12.63                              | 12                                             | 43                    | 29               | 66    | 189                   | 45    | 2                     | 6     |
| 43       | 43 plants.....                    | 1915  | 419                  | 63.3                              | .205                            | 13.05                              | 9                                              | 38                    | 57               | 58    | 185                   | 62    | 8                     | 2     |
| 44       | Unclassified—nonproductive:       | 1914  | 1,087                | 65.3                              | .206                            | 13.38                              | 2                                              | 77                    | 67               | 384   | 233                   | 172   | 99                    | 53    |
| 45       | 43 plants.....                    | 1915  | 1,093                | 63.7                              | .208                            | 13.23                              | 2                                              | 72                    | 198              | 392   | 167                   | 164   | 72                    | 26    |

<sup>1</sup> Including 4 employees whose full-time hours per week were 84½, and 2 employees whose full-time hours per week were 91.



# 352 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

TABLE P.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—

[The abbreviation "G. L. and M. W." stands for "Great Lakes and

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |       |                      |       |                      |       |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-------|----------------------|-------|----------------------|-------|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60    | Over 60 and under 72 | 72    | Over 72 and under 84 | 84    |
|          | Stockers:                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 1        | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 2        | 9 plants.....                               | 1913  | 110                  | 58.0                              | \$0.251                         | \$14.51                            | .....                                          | 52                   | .....           | 44    | 10                   | 4     | .....                | ..... |
|          |                                             | 1914  | 99                   | 58.8                              | .210                            | 12.40                              | .....                                          | 38                   | .....           | 33    | 24                   | 4     | .....                | ..... |
| 3        | 12 plants.....                              | 1914  | 139                  | 59.9                              | .201                            | 12.14                              | .....                                          | 47                   | .....           | 28    | 60                   | 4     | .....                | ..... |
| 4        |                                             | 1915  | 131                  | 60.1                              | .192                            | 11.54                              | .....                                          | 45                   | .....           | 26    | 56                   | 4     | .....                | ..... |
| 5        | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 6        | 6 plants.....                               | 1913  | 102                  | 62.4                              | .207                            | 12.89                              | .....                                          | 9                    | 4               | 46    | 43                   | ..... | .....                | ..... |
|          |                                             | 1914  | 82                   | 63.4                              | .206                            | 13.07                              | .....                                          | 2                    | .....           | 39    | 41                   | ..... | .....                | ..... |
| 7        | 7 plants.....                               | 1914  | 119                  | 63.8                              | .197                            | 12.52                              | .....                                          | 4                    | 10              | 39    | 66                   | ..... | .....                | ..... |
| 8        |                                             | 1915  | 133                  | 62.3                              | .199                            | 12.34                              | .....                                          | 3                    | 77              | 43    | 43                   | 10    | .....                | ..... |
| 9        | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 10       | 10 plants.....                              | 1913  | 105                  | 61.6                              | .221                            | 13.40                              | 14                                             | 10                   | .....           | 14    | 66                   | 1     | .....                | ..... |
|          |                                             | 1914  | 109                  | 59.4                              | .228                            | 13.36                              | 14                                             | 19                   | .....           | 14    | 61                   | 1     | .....                | ..... |
| 11       | 15 plants.....                              | 1914  | 286                  | 59.8                              | .206                            | 12.28                              | 14                                             | 117                  | .....           | 14    | 119                  | 22    | .....                | ..... |
| 12       |                                             | 1915  | 266                  | 59.7                              | .205                            | 12.29                              | 8                                              | 111                  | 15              | 6     | 115                  | 11    | .....                | ..... |
| 13       | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 14       | 6 plants.....                               | 1913  | 57                   | 58.0                              | .155                            | 8.85                               | .....                                          | 19                   | .....           | 24    | 14                   | ..... | .....                | ..... |
|          |                                             | 1914  | 53                   | 57.9                              | .157                            | 8.99                               | .....                                          | 19                   | .....           | 20    | 14                   | ..... | .....                | ..... |
| 15       | 7 plants.....                               | 1914  | 59                   | 58.1                              | .162                            | 9.29                               | .....                                          | 19                   | .....           | 26    | 14                   | ..... | .....                | ..... |
| 16       |                                             | 1915  | 52                   | 57.9                              | .172                            | 9.83                               | .....                                          | 18                   | .....           | 20    | 14                   | ..... | .....                | ..... |
| 17       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 18       | 31 plants.....                              | 1913  | 374                  | 60.2                              | .216                            | 12.89                              | 14                                             | 90                   | 4               | 128   | 133                  | 5     | .....                | ..... |
|          |                                             | 1914  | 343                  | 59.9                              | .207                            | 12.34                              | 14                                             | 78                   | .....           | 106   | 140                  | 5     | .....                | ..... |
| 19       | 41 plants.....                              | 1914  | 603                  | 60.4                              | .199                            | 12.00                              | 14                                             | 187                  | 10              | 107   | 259                  | 26    | .....                | ..... |
| 20       |                                             | 1915  | 582                  | 60.2                              | .198                            | 11.91                              | 8                                              | 177                  | 92              | 52    | 228                  | 25    | .....                | ..... |
| 21       | Heaters:                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 22       | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
|          | 12 plants.....                              | 1913  | 89                   | 59.8                              | .498                            | 29.58                              | .....                                          | 28                   | 14              | 2     | 41                   | 4     | .....                | ..... |
|          |                                             | 1914  | 81                   | 59.6                              | .488                            | 29.06                              | .....                                          | 29                   | 11              | 2     | 35                   | 4     | .....                | ..... |
| 23       | 15 plants.....                              | 1914  | 111                  | 59.3                              | .483                            | 28.65                              | .....                                          | 41                   | 14              | 2     | 50                   | 4     | .....                | ..... |
| 24       |                                             | 1915  | 112                  | 59.4                              | .492                            | 29.06                              | .....                                          | 39                   | 18              | 1     | 50                   | 4     | .....                | ..... |
| 25       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 26       | 11 plants.....                              | 1913  | 88                   | 62.0                              | .589                            | 36.32                              | 3                                              | 15                   | 18              | ..... | 43                   | 2     | 7                    | ..... |
|          |                                             | 1914  | 77                   | 61.8                              | .530                            | 32.58                              | 3                                              | 15                   | 14              | ..... | 37                   | 2     | 6                    | ..... |
| 27       | 14 plants.....                              | 1914  | 110                  | 62.1                              | .568                            | 35.25                              | 3                                              | 18                   | 19              | ..... | 62                   | 2     | 6                    | ..... |
| 28       |                                             | 1915  | 112                  | 61.5                              | .615                            | 37.87                              | 12                                             | 9                    | 19              | ..... | 66                   | 5     | 1                    | ..... |
| 29       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 30       | 12 plants.....                              | 1913  | 77                   | 58.8                              | .637                            | 36.33                              | 16                                             | 14                   | 2               | 1     | 39                   | 3     | .....                | 2     |
|          |                                             | 1914  | 77                   | 56.5                              | .613                            | 33.59                              | 25                                             | 11                   | .....           | 1     | 35                   | 3     | .....                | 2     |
| 31       | 19 plants.....                              | 1914  | 151                  | 59.5                              | .553                            | 32.18                              | 25                                             | 11                   | 18              | 1     | 91                   | 1     | 2                    | 2     |
| 32       |                                             | 1915  | 132                  | 60.4                              | .553                            | 32.82                              | 16                                             | 11                   | 22              | ..... | 78                   | 1     | 2                    | 2     |
| 33       | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 34       | 9 plants.....                               | 1913  | 41                   | 56.3                              | .707                            | 39.55                              | 10                                             | 9                    | 10              | ..... | 12                   | ..... | .....                | ..... |
|          |                                             | 1914  | 37                   | 56.6                              | .663                            | 37.04                              | 8                                              | 10                   | 9               | ..... | 8                    | 2     | .....                | ..... |
| 35       |                                             | 1915  | 36                   | 56.6                              | .652                            | 36.25                              | 8                                              | 9                    | 9               | ..... | 8                    | 2     | .....                | ..... |
| 36       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 37       | 44 plants.....                              | 1913  | 295                  | 59.7                              | .590                            | 34.74                              | 29                                             | 66                   | 44              | 3     | 135                  | 9     | 7                    | 2     |
|          |                                             | 1914  | 272                  | 58.9                              | .559                            | 32.42                              | 36                                             | 65                   | 34              | 3     | 115                  | 11    | 6                    | 2     |
| 38       | 57 plants.....                              | 1914  | 409                  | 59.9                              | .548                            | 32.49                              | 36                                             | 80                   | 60              | 3     | 211                  | 9     | 8                    | 2     |
| 39       |                                             | 1915  | 392                  | 60.1                              | .562                            | 33.50                              | 36                                             | 68                   | 68              | 1     | 202                  | 12    | 3                    | 2     |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
BAR MILLS.

Middle West.' The figures for each group of years are for identical plants.]

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                |                                |                                 |                                  | 2<br>8                           |                                  | 6<br>34                          | 32<br>14                         | 8<br>18                          | 36<br>11                         | 20<br>14                         | 6                                |                                  |                                  |                            | 1<br>2      |
|                                               |                                |                                |                                 | 3<br>3                           | 12<br>17                         | 5<br>6                           | 36<br>11                         | 23<br>47                         | 41<br>39                         | 5<br>4                           | 14<br>3                          | 1                                |                                  |                                  |                            | 3<br>4      |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 25<br>15                         | 69<br>55                         | 2<br>8                           | 6                                |                                  |                                  |                                  |                            | 5<br>6      |
|                                               |                                |                                |                                 |                                  |                                  | 25<br>25                         | 4<br>4                           | 15<br>4                          | 64<br>90                         | 11<br>7                          | 3                                |                                  |                                  |                                  |                            | 7<br>8      |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 10<br>5                          | 30<br>30                         | 41<br>48                         | 22<br>26                         | 2                                |                                  |                                  |                                  |                            | 9<br>10     |
|                                               |                                |                                |                                 |                                  |                                  | 5<br>4                           | 100<br>103                       | 41<br>34                         | 106<br>90                        | 34<br>19                         |                                  | 16                               |                                  |                                  |                            | 11<br>12    |
|                                               |                                |                                |                                 |                                  | 30<br>26                         | 5<br>5                           | 8<br>8                           | 4<br>4                           | 10<br>10                         |                                  |                                  |                                  |                                  |                                  |                            | 13<br>14    |
|                                               |                                |                                |                                 |                                  | 26<br>23                         | 5<br>3                           | 8<br>8                           | 4                                | 16<br>14                         |                                  | 4                                |                                  |                                  |                                  |                            | 15<br>16    |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 17          |
|                                               |                                |                                |                                 |                                  | 32<br>34                         | 5<br>5                           | 24<br>51                         | 91<br>63                         | 128<br>131                       | 60<br>45                         | 28<br>14                         | 6                                |                                  |                                  |                            | 18<br>19    |
|                                               |                                |                                |                                 | 3<br>3                           | 38<br>40                         | 40<br>38                         | 148<br>126                       | 83<br>85                         | 227<br>233                       | 50<br>30                         | 14<br>26                         | 1                                |                                  |                                  |                            | 20          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 21          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 18<br>18                         | 33<br>30                         | 18<br>17                         | 14<br>13                         | 6                          | 22          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 4<br>2                           | 29<br>35                         | 30<br>18                         | 23<br>37                         | 17<br>14                         | 6<br>6                     | 23<br>24    |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1<br>1                           | 3<br>4                           | 7<br>15                          | 14<br>17                         | 24<br>21                         | 17<br>7                          | 22                         | 25<br>26    |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 4<br>3                           | 19<br>16                         | 24<br>17                         | 21<br>33                         | 17<br>16                         | 24<br>27                   | 27<br>28    |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 5<br>11                          | 11<br>16                         | 18<br>10                         | 27<br>14                         | 16<br>26                   | 29<br>30    |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 25<br>13                         | 52<br>44                         | 24<br>33                         | 20<br>24                         | 30<br>18                   | 31<br>32    |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 6<br>3                           | 2<br>6                           | 5<br>9                           | 9<br>4                           | 19<br>15                   | 33<br>34    |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2<br>9                           | 9<br>10                          | 10                               | 1                                | 14                         | 35          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1<br>1                           | 3<br>5                           | 36<br>47                         | 60<br>69                         | 65<br>57                         | 67<br>38                         | 63<br>55                   | 36<br>37    |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 3                                | 8<br>5                           | 76<br>66                         | 112<br>88                        | 77<br>113                        | 58<br>55                         | 75<br>65                   | 38<br>39    |

TABLE P.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, 1913 TO 1915—

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                       |                  |       |                       |       |                       |       |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|-----------------------|------------------|-------|-----------------------|-------|-----------------------|-------|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56. | 56 and under 60. | 60.   | Over 60 and under 72. | 72.   | Over 72 and under 84. | 84.   |
| 1        | Heaters' helpers: Eastern—                  |       |                      |                                   |                                 |                                    |                                                |                       |                  |       |                       |       |                       |       |
| 2        | 12 plants.....                              | 1913  | 156                  | 59.5                              | \$0.235                         | \$14.06                            | .....                                          | 43                    | 49               | 7     | 49                    | 8     | .....                 | ..... |
| 3        |                                             | 1914  | 129                  | 59.0                              | .246                            | 14.73                              | .....                                          | 46                    | 30               | 7     | 38                    | 8     | .....                 | ..... |
| 4        | 15 plants.....                              | 1914  | 155                  | 58.8                              | .257                            | 15.29                              | .....                                          | 52                    | 46               | 2     | 47                    | 8     | .....                 | ..... |
| 5        |                                             | 1915  | 145                  | 59.3                              | .265                            | 15.75                              | .....                                          | 40                    | 46               | 1     | 50                    | 8     | .....                 | ..... |
| 6        | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                       |                  |       |                       |       |                       |       |
| 7        | 11 plants.....                              | 1913  | 179                  | 62.0                              | .300                            | 18.41                              | 3                                              | 41                    | 33               | ..... | 92                    | 10    | .....                 | ..... |
| 8        |                                             | 1914  | 177                  | 62.0                              | .267                            | 16.43                              | 3                                              | 40                    | 32               | ..... | 92                    | 10    | .....                 | ..... |
| 9        | 14 plants.....                              | 1914  | 235                  | 61.7                              | .262                            | 16.08                              | 7                                              | 51                    | 32               | ..... | 135                   | 10    | .....                 | ..... |
| 10       |                                             | 1915  | 237                  | 60.8                              | .266                            | 16.06                              | 31                                             | 31                    | 30               | ..... | 128                   | 15    | 2                     | ..... |
| 11       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                       |                  |       |                       |       |                       |       |
| 12       | 10 plants.....                              | 1913  | 69                   | 63.8                              | .298                            | 18.47                              | 10                                             | .....                 | 6                | 2     | 46                    | 3     | .....                 | 2     |
| 13       |                                             | 1914  | 70                   | 63.1                              | .310                            | 18.89                              | 10                                             | .....                 | 6                | 3     | 46                    | 3     | .....                 | 2     |
| 14       | 16 plants.....                              | 1914  | 141                  | 63.7                              | .291                            | 18.17                              | 10                                             | 4                     | 8                | 4     | 109                   | 4     | .....                 | 2     |
| 15       |                                             | 1915  | 133                  | 62.1                              | .310                            | 19.22                              | 16                                             | 6                     | 8                | 1     | 97                    | 3     | .....                 | 2     |
| 16       | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                       |                  |       |                       |       |                       |       |
| 17       | 9 plants.....                               | 1913  | 63                   | 54.8                              | .233                            | 12.78                              | 24                                             | 12                    | 10               | ..... | 17                    | ..... | .....                 | ..... |
| 18       |                                             | 1914  | 51                   | 55.8                              | .232                            | 12.81                              | 18                                             | 9                     | 10               | ..... | 9                     | 5     | .....                 | ..... |
| 19       |                                             | 1915  | 55                   | 56.1                              | .225                            | 12.44                              | 18                                             | 10                    | 11               | ..... | 11                    | 5     | .....                 | ..... |
| 20       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                       |                  |       |                       |       |                       |       |
| 21       | 42 plants.....                              | 1913  | 467                  | 60.5                              | .269                            | 16.21                              | 37                                             | 96                    | 98               | 9     | 204                   | 21    | .....                 | 2     |
| 22       |                                             | 1914  | 427                  | 60.6                              | .264                            | 15.89                              | 31                                             | 95                    | 78               | 10    | 185                   | 26    | .....                 | 2     |
| 23       | 54 plants.....                              | 1914  | 582                  | 60.9                              | .265                            | 16.09                              | 35                                             | 116                   | 96               | 6     | 300                   | 27    | .....                 | 2     |
| 24       |                                             | 1915  | 570                  | 60.3                              | .272                            | 16.37                              | 65                                             | 87                    | 95               | 2     | 286                   | 31    | 2                     | 2     |
| 25       | Chargers and helpers: Eastern—              |       |                      |                                   |                                 |                                    |                                                |                       |                  |       |                       |       |                       |       |
| 26       | 4 plants.....                               | 1913  | 27                   | 60.9                              | .184                            | 11.14                              | .....                                          | 2                     | 5                | 4     | 16                    | ..... | .....                 | ..... |
| 27       |                                             | 1914  | 19                   | 60.3                              | .202                            | 12.17                              | .....                                          | 2                     | 5                | 2     | 10                    | ..... | .....                 | ..... |
| 28       | 6 plants.....                               | 1914  | 40                   | 59.9                              | .211                            | 12.50                              | .....                                          | 4                     | 14               | 2     | 20                    | ..... | .....                 | ..... |
| 29       |                                             | 1915  | 37                   | 60.0                              | .214                            | 12.68                              | .....                                          | 4                     | 12               | 1     | 20                    | ..... | .....                 | ..... |
| 30       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                       |                  |       |                       |       |                       |       |
| 31       | 10 plants.....                              | 1913  | 110                  | 62.9                              | .229                            | 14.22                              | .....                                          | 15                    | 26               | ..... | 67                    | ..... | 2                     | ..... |
| 32       |                                             | 1914  | 99                   | 62.6                              | .224                            | 13.90                              | .....                                          | 15                    | 26               | ..... | 56                    | ..... | 2                     | ..... |
| 33       | 12 plants.....                              | 1914  | 133                  | 62.4                              | .222                            | 13.70                              | 2                                              | 18                    | 28               | ..... | 83                    | ..... | 2                     | ..... |
| 34       |                                             | 1915  | 130                  | 61.7                              | .227                            | 13.77                              | 21                                             | .....                 | 24               | ..... | 79                    | 4     | 2                     | ..... |
| 35       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                       |                  |       |                       |       |                       |       |
| 36       | 10 plants.....                              | 1913  | 92                   | 63.8                              | .238                            | 15.04                              | 6                                              | 10                    | .....            | 2     | 66                    | 8     | .....                 | ..... |
| 37       |                                             | 1914  | 83                   | 63.5                              | .230                            | 14.41                              | 6                                              | 9                     | .....            | 2     | 62                    | 4     | .....                 | ..... |
| 38       | 16 plants.....                              | 1914  | 140                  | 62.7                              | .226                            | 14.06                              | 6                                              | 17                    | 16               | 2     | 95                    | 4     | .....                 | ..... |
| 39       |                                             | 1915  | 130                  | 63.0                              | .231                            | 14.50                              | 3                                              | 19                    | 16               | ..... | 90                    | 2     | .....                 | ..... |
| 40       | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                       |                  |       |                       |       |                       |       |
| 41       | 7 plants.....                               | 1913  | 33                   | 59.0                              | .214                            | 12.68                              | 4                                              | 7                     | 6                | ..... | 16                    | ..... | .....                 | ..... |
| 42       |                                             | 1914  | 32                   | 59.0                              | .192                            | 11.27                              | 4                                              | 7                     | 5                | ..... | 16                    | ..... | .....                 | ..... |
| 43       | 7 plants.....                               | 1914  | 33                   | 58.6                              | .193                            | 11.23                              | 5                                              | 7                     | 5                | ..... | 16                    | ..... | .....                 | ..... |
| 44       |                                             | 1915  | 36                   | 58.6                              | .179                            | 10.34                              | 5                                              | 7                     | 8                | ..... | 16                    | ..... | .....                 | ..... |
| 45       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                       |                  |       |                       |       |                       |       |
| 46       | 31 plants.....                              | 1913  | 262                  | 62.5                              | .226                            | 14.00                              | 10                                             | 34                    | 37               | 6     | 165                   | 8     | 2                     | ..... |
| 47       |                                             | 1914  | 233                  | 62.2                              | .220                            | 13.58                              | 10                                             | 33                    | 36               | 4     | 144                   | 4     | 2                     | ..... |
| 48       | 41 plants.....                              | 1914  | 346                  | 61.9                              | .219                            | 13.47                              | 13                                             | 46                    | 63               | 4     | 214                   | 4     | 2                     | ..... |
| 49       |                                             | 1915  | 333                  | 61.7                              | .222                            | 13.56                              | 29                                             | 30                    | 60               | 1     | 205                   | 6     | 2                     | ..... |
| 50       | Drag-downs: Eastern—                        |       |                      |                                   |                                 |                                    |                                                |                       |                  |       |                       |       |                       |       |
| 51       | 9 plants.....                               | 1913  | 42                   | 60.1                              | .252                            | 15.21                              | .....                                          | 14                    | 9                | 1     | 12                    | 6     | .....                 | ..... |
| 52       |                                             | 1914  | 42                   | 60.2                              | .251                            | 15.29                              | .....                                          | 12                    | 13               | 1     | 10                    | 6     | .....                 | ..... |
| 53       | 11 plants.....                              | 1914  | 61                   | 60.1                              | .244                            | 14.78                              | .....                                          | 20                    | 12               | ..... | 23                    | 6     | .....                 | ..... |
| 54       |                                             | 1915  | 54                   | 60.1                              | .242                            | 14.61                              | .....                                          | 20                    | 7                | ..... | 21                    | 6     | .....                 | ..... |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | Line No. |
|-----------------------------------------------|--------------------|--------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-------------------|----------|
| 6 and under 7 cts.                            | 7 and under 8 cts. | 8 and under 9 cts. | 9 and under 10 cts. | 10 and under 12 cts. | 12 and under 14 cts. | 14 and under 16 cts. | 16 and under 18 cts. | 18 and under 20 cts. | 20 and under 25 cts. | 25 and under 30 cts. | 30 and under 40 cts. | 40 and under 50 cts. | 50 and under 60 cts. | 60 and under 70 cts. | 70 cts. and over. |          |
|                                               |                    |                    |                     |                      |                      | 17                   | 24                   | 12                   | 52                   | 14                   | 36                   | 1                    |                      |                      |                   | 1        |
|                                               |                    |                    |                     | 1                    |                      | 7                    | 25                   | 9                    | 31                   | 16                   | 40                   |                      |                      |                      |                   | 2        |
|                                               |                    |                    |                     |                      | 1                    | 7                    | 20                   | 11                   | 29                   | 41                   | 46                   |                      |                      |                      |                   | 3        |
|                                               |                    |                    |                     |                      |                      | 12                   | 5                    | 7                    | 22                   | 53                   | 45                   | 1                    |                      |                      |                   | 4        |
|                                               |                    |                    |                     |                      |                      | 2                    |                      | 9                    | 60                   | 36                   | 42                   | 28                   | 2                    |                      |                   | 5        |
|                                               |                    |                    |                     |                      |                      |                      | 2                    | 20                   | 63                   | 46                   | 34                   | 12                   |                      |                      |                   | 6        |
|                                               |                    |                    |                     |                      |                      |                      | 6                    | 22                   | 95                   | 60                   | 34                   | 18                   |                      |                      |                   | 7        |
|                                               |                    |                    |                     |                      |                      |                      | 11                   | 19                   | 93                   | 49                   | 50                   | 11                   | 4                    |                      |                   | 8        |
|                                               |                    |                    |                     |                      |                      |                      |                      | 9                    | 12                   | 17                   | 23                   | 6                    | 2                    |                      |                   | 9        |
|                                               |                    |                    |                     |                      |                      |                      |                      | 9                    | 11                   | 13                   | 25                   | 4                    | 8                    |                      |                   | 10       |
|                                               |                    |                    |                     |                      |                      |                      | 5                    | 14                   | 36                   | 33                   | 33                   | 10                   | 10                   |                      |                   | 11       |
|                                               |                    |                    |                     |                      |                      |                      | 5                    | 13                   | 27                   | 34                   | 25                   | 23                   |                      | 6                    |                   | 12       |
|                                               |                    |                    |                     |                      |                      | 9                    | 9                    | 9                    | 18                   | 3                    | 11                   | 4                    |                      |                      |                   | 13       |
|                                               |                    |                    |                     |                      |                      | 5                    | 8                    | 3                    | 23                   | 5                    | 5                    | 2                    |                      |                      |                   | 14       |
|                                               |                    |                    |                     |                      |                      | 8                    | 9                    | 2                    | 24                   | 4                    | 7                    | 1                    |                      |                      |                   | 15       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      | 28                   | 33                   | 39                   | 142                  | 70                   | 112                  | 39                   | 4                    |                      |                   | 16       |
|                                               |                    |                    |                     |                      | 1                    | 12                   | 35                   | 41                   | 128                  | 80                   | 104                  | 18                   | 8                    |                      |                   | 17       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      | 1                    | 12                   | 39                   | 50                   | 183                  | 139                  | 118                  | 30                   | 10                   |                      |                   | 18       |
|                                               |                    |                    |                     |                      |                      | 20                   | 30                   | 41                   | 166                  | 140                  | 127                  | 36                   | 4                    | 6                    |                   | 19       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      |                      | 12                   | 7                    | 6                    | 2                    |                      |                      |                      |                      |                   | 20       |
|                                               |                    |                    |                     |                      |                      |                      | 4                    | 5                    | 8                    | 2                    |                      |                      |                      |                      |                   | 21       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      | 10                   | 4                    | 5                    | 12                   | 6                    | 3                    |                      |                      |                      |                   | 22       |
|                                               |                    |                    |                     |                      |                      | 10                   | 6                    | 6                    | 3                    | 7                    | 4                    | 1                    |                      |                      |                   | 23       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      | 1                    | 10                   | 37                   | 31                   | 19                   | 8                    | 3                    | 1                    |                      |                   | 24       |
|                                               |                    |                    |                     |                      |                      |                      | 14                   | 19                   | 46                   | 12                   | 8                    |                      |                      |                      |                   | 25       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      |                      | 17                   | 19                   | 72                   | 17                   | 8                    |                      |                      |                      |                   | 26       |
|                                               |                    |                    |                     |                      |                      |                      | 16                   | 23                   | 61                   | 17                   | 11                   | 2                    |                      |                      |                   | 27       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      |                      | 16                   | 18                   | 30                   | 16                   | 4                    | 8                    |                      |                      |                   | 28       |
|                                               |                    |                    |                     |                      |                      |                      | 14                   | 11                   | 36                   | 18                   | 4                    |                      |                      |                      |                   | 29       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      |                      | 14                   | 23                   | 69                   | 28                   | 6                    |                      |                      |                      |                   | 30       |
|                                               |                    |                    |                     |                      |                      |                      | 13                   | 23                   | 61                   | 16                   | 13                   | 4                    |                      |                      |                   | 31       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      | 3                    | 6                    | 2                    | 18                   | 3                    | 1                    |                      |                      |                      |                   | 32       |
|                                               |                    |                    |                     |                      |                      | 4                    | 14                   | 4                    | 6                    | 3                    | 1                    |                      |                      |                      |                   | 33       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      | 4                    | 14                   | 4                    | 7                    | 3                    | 1                    |                      |                      |                      |                   | 34       |
|                                               |                    |                    | 4                   |                      |                      | 6                    | 15                   | 4                    | 1                    | 5                    | 1                    |                      |                      |                      |                   | 35       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      |                      | 4                    | 44                   | 64                   | 85                   | 40                   | 13                   |                      |                      |                   | 36       |
|                                               |                    |                    |                     |                      |                      |                      | 4                    | 39                   | 96                   | 35                   | 13                   |                      | 1                    |                      |                   | 37       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      |                      | 14                   | 49                   | 51                   | 160                  | 54                   | 18                   |                      |                      |                   | 38       |
|                                               |                    |                    | 4                   |                      |                      |                      | 16                   | 50                   | 56                   | 126                  | 45                   | 29                   | 7                    |                      |                   | 39       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      |                      | 2                    |                      | 16                   | 18                   | 6                    |                      |                      |                      |                   | 40       |
|                                               |                    |                    |                     |                      |                      |                      | 2                    | 2                    | 19                   | 13                   | 6                    |                      |                      |                      |                   | 41       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      | 1                    | 1                    | 3                    | 2                    | 29                   | 18                   | 7                    |                      |                      |                      |                   | 42       |
|                                               |                    |                    |                     |                      |                      |                      |                      | 7                    | 31                   | 12                   | 3                    | 1                    |                      |                      |                   | 43       |

TABLE P.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—

| Line No. | Occupation, district, and number of plants.         | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |       |                      |       |                      |       |
|----------|-----------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-------|----------------------|-------|----------------------|-------|
|          |                                                     |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60    | Over 60 and under 72 | 72    | Over 72 and under 84 | 84    |
| 1        | Drag-downs—Concl'd.<br>Pittsburgh—<br>9 plants..... | 1913  | 73                   | 65.8                              | \$0.261                         | \$17.15                            | .....                                          | 1                    | 16              | ..... | 46                   | 6     | 4                    | ..... |
| 2        |                                                     | 1914  | 68                   | 65.7                              | .234                            | 15.30                              | .....                                          | 1                    | 16              | ..... | 43                   | 6     | 2                    | ..... |
| 3        | 12 plants.....                                      | 1914  | 95                   | 65.1                              | .234                            | 15.19                              | .....                                          | 2                    | 20              | ..... | 65                   | 6     | 2                    | ..... |
| 4        |                                                     | 1915  | 96                   | 64.8                              | .242                            | 15.65                              | .....                                          | 3                    | 20              | ..... | 63                   | 8     | 2                    | ..... |
| 5        | G. L. and M. W.—<br>7 plants.....                   | 1913  | 33                   | 56.0                              | .375                            | 20.98                              | 6                                              | 10                   | 4               | ..... | 12                   | 1     | .....                | ..... |
| 6        |                                                     | 1914  | 31                   | 54.9                              | .381                            | 20.77                              | 9                                              | 7                    | 2               | ..... | 12                   | 1     | .....                | ..... |
| 7        | 14 plants.....                                      | 1914  | 76                   | 57.5                              | .356                            | 20.34                              | 9                                              | 23                   | 8               | ..... | 39                   | ..... | .....                | ..... |
| 8        |                                                     | 1915  | 73                   | 59.1                              | .365                            | 21.55                              | 6                                              | 19                   | 8               | ..... | 40                   | ..... | .....                | ..... |
| 9        | Southern—<br>8 plants.....                          | 1913  | 38                   | 56.2                              | .274                            | 15.12                              | 10                                             | 9                    | 7               | ..... | 12                   | ..... | .....                | ..... |
| 10       |                                                     | 1914  | 33                   | 56.4                              | .277                            | 15.25                              | 8                                              | 9                    | 7               | ..... | 6                    | 3     | .....                | ..... |
| 11       |                                                     | 1915  | 33                   | 56.4                              | .265                            | 14.50                              | 8                                              | 9                    | 7               | ..... | 6                    | 3     | .....                | ..... |
| 12       | Total—<br>33 plants.....                            | 1913  | 186                  | 60.8                              | .282                            | 16.98                              | 16                                             | 34                   | 36              | 1     | 82                   | 13    | 4                    | ..... |
| 13       |                                                     | 1914  | 174                  | 60.7                              | .272                            | 16.26                              | 17                                             | 29                   | 38              | 1     | 71                   | 16    | 2                    | ..... |
| 14       | 45 plants.....                                      | 1914  | 265                  | 60.7                              | .277                            | 16.58                              | 17                                             | 54                   | 47              | ..... | 130                  | 15    | 2                    | ..... |
| 15       |                                                     | 1915  | 256                  | 61.1                              | .280                            | 16.90                              | 14                                             | 51                   | 42              | ..... | 130                  | 17    | 2                    | ..... |
| 16       | Roll engineers:<br>Eastern—<br>12 plants.....       | 1913  | 45                   | 67.1                              | .216                            | 14.37                              | .....                                          | .....                | 6               | 5     | 13                   | 14    | 7                    | ..... |
| 17       |                                                     | 1914  | 42                   | 67.4                              | .215                            | 14.38                              | .....                                          | .....                | 4               | 5     | 12                   | 14    | 7                    | ..... |
| 18       | 14 plants.....                                      | 1914  | 49                   | 67.8                              | .210                            | 14.10                              | .....                                          | .....                | 4               | 5     | 18                   | 18    | 2                    | 2     |
| 19       |                                                     | 1915  | 47                   | 68.0                              | .205                            | 13.81                              | .....                                          | .....                | 4               | 4     | 17                   | 18    | 2                    | 2     |
| 20       | Pittsburgh—<br>11 plants.....                       | 1913  | 56                   | 70.6                              | .261                            | 18.36                              | .....                                          | 1                    | .....           | ..... | 33                   | ..... | 22                   | ..... |
| 21       |                                                     | 1914  | 57                   | 69.6                              | .260                            | 18.10                              | .....                                          | 1                    | .....           | ..... | 32                   | 10    | 14                   | ..... |
| 22       | 14 plants.....                                      | 1914  | 65                   | 69.4                              | .259                            | 18.00                              | .....                                          | 1                    | .....           | ..... | 36                   | 14    | 14                   | ..... |
| 23       |                                                     | 1915  | 65                   | 69.8                              | .259                            | 17.88                              | .....                                          | 1                    | .....           | ..... | 36                   | 14    | 14                   | ..... |
| 24       | G. L. and M. W.—<br>10 plants.....                  | 1913  | 31                   | 73.0                              | .270                            | 19.73                              | .....                                          | .....                | .....           | ..... | 16                   | 5     | 4                    | 6     |
| 25       |                                                     | 1914  | 30                   | 71.4                              | .275                            | 19.64                              | .....                                          | .....                | .....           | 2     | 16                   | 5     | 3                    | 4     |
| 26       | 16 plants.....                                      | 1914  | 49                   | 70.6                              | .269                            | 19.05                              | .....                                          | .....                | 2               | ..... | 27                   | 9     | 5                    | 6     |
| 27       |                                                     | 1915  | 47                   | 69.1                              | .270                            | 18.65                              | .....                                          | .....                | 2               | ..... | 29                   | 9     | 5                    | 2     |
| 28       | Southern—<br>8 plants.....                          | 1913  | 21                   | 64.4                              | .240                            | 15.45                              | .....                                          | 2                    | 2               | 4     | 7                    | 6     | .....                | ..... |
| 29       |                                                     | 1914  | 20                   | 64.7                              | .241                            | 15.54                              | .....                                          | 2                    | 2               | 4     | 5                    | 7     | .....                | ..... |
| 30       |                                                     | 1915  | 19                   | 64.9                              | .242                            | 15.65                              | .....                                          | 2                    | 2               | 3     | 5                    | 7     | .....                | ..... |
| 31       | Total—<br>41 plants.....                            | 1913  | 153                  | 69.2                              | .247                            | 17.06                              | .....                                          | 3                    | 8               | 9     | 69                   | 25    | 33                   | 6     |
| 32       |                                                     | 1914  | 149                  | 68.7                              | .248                            | 17.02                              | .....                                          | 3                    | 6               | 11    | 65                   | 36    | 24                   | 4     |
| 33       | 52 plants.....                                      | 1914  | 183                  | 68.8                              | .247                            | 16.97                              | .....                                          | 3                    | 8               | 9     | 86                   | 48    | 21                   | 8     |
| 34       |                                                     | 1915  | 178                  | 68.6                              | .246                            | 16.77                              | .....                                          | 3                    | 8               | 7     | 87                   | 48    | 21                   | 4     |
| 35       | Rollers, 8-inch:<br>Eastern—<br>4 plants.....       | 1913  | 6                    | 53.5                              | .815                            | 43.80                              | .....                                          | 4                    | 2               | ..... | .....                | ..... | .....                | ..... |
| 36       |                                                     | 1914  | 5                    | 53.4                              | .723                            | 39.04                              | .....                                          | 3                    | 2               | ..... | .....                | ..... | .....                | ..... |
| 37       | 6 plants.....                                       | 1914  | 9                    | 55.6                              | .748                            | 41.70                              | .....                                          | 6                    | 1               | ..... | 2                    | ..... | .....                | ..... |
| 38       |                                                     | 1915  | 9                    | 55.6                              | .889                            | 49.44                              | .....                                          | 6                    | 1               | ..... | 2                    | ..... | .....                | ..... |
| 39       | Pittsburgh—<br>6 plants.....                        | 1913  | 20                   | 59.1                              | 1.118                           | 67.10                              | 2                                              | 8                    | .....           | 1     | 8                    | ..... | 1                    | ..... |
| 40       |                                                     | 1914  | 20                   | 60.5                              | .984                            | 60.22                              | 2                                              | 6                    | .....           | 3     | 8                    | ..... | 1                    | ..... |
| 41       | 7 plants.....                                       | 1914  | 22                   | 61.0                              | .978                            | 60.23                              | 2                                              | 6                    | .....           | 3     | 10                   | ..... | 1                    | ..... |
| 42       |                                                     | 1915  | 22                   | 60.1                              | 1.073                           | 65.42                              | 6                                              | 2                    | .....           | 3     | 10                   | ..... | 1                    | ..... |
| 43       | G. L. and M. W.—<br>2 plants.....                   | 1913  | 4                    | 61.5                              | 1.061                           | 64.92                              | .....                                          | 1                    | 1               | ..... | 2                    | ..... | .....                | ..... |
| 44       |                                                     | 1914  | 4                    | 61.5                              | .944                            | 58.70                              | .....                                          | 1                    | 1               | ..... | 2                    | ..... | .....                | ..... |
| 45       | 4 plants.....                                       | 1914  | 8                    | 59.5                              | .860                            | 51.52                              | .....                                          | 3                    | 1               | 1     | 3                    | ..... | .....                | ..... |
| 46       |                                                     | 1915  | 7                    | 63.6                              | 1.056                           | 68.83                              | .....                                          | 1                    | .....           | 2     | 4                    | ..... | .....                | ..... |



AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 1           |
|                                               |                                |                                |                                 | 4                                | 4                                | 1                                | 5                                | 9                                | 25                               | 8                                | 24                               | 3                                |                                  |                                  |                            | 2           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 23                               | 13                               | 14                               |                                  |                                  |                                  |                            | 3           |
|                                               |                                |                                |                                 | 4                                | 4                                | 1                                | 5                                | 4                                | 42                               | 19                               | 16                               |                                  |                                  |                                  |                            | 4           |
|                                               |                                |                                |                                 |                                  | 4                                | 4                                | 4                                | 4                                | 40                               | 17                               | 23                               |                                  |                                  |                                  |                            | 5           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 19                               | 11                               |                                  |                                  |                            | 6           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 16                               | 13                               |                                  |                                  |                            | 7           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 10                               | 47                               | 19                               |                                  |                                  |                            | 8           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 16                               | 37                               | 12                               | 6                                |                                  |                            | 9           |
|                                               |                                |                                |                                 |                                  |                                  | 1                                | 8                                | 1                                | 8                                | 2                                | 16                               | 2                                |                                  |                                  |                            | 10          |
|                                               |                                |                                |                                 |                                  |                                  | 1                                | 5                                | 2                                | 6                                | 1                                | 16                               | 2                                |                                  |                                  |                            | 11          |
|                                               |                                |                                |                                 | 4                                |                                  | 2                                | 4                                |                                  | 4                                | 3                                | 14                               | 2                                |                                  |                                  |                            | 12          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 13          |
|                                               |                                |                                |                                 | 4                                | 4                                | 1                                | 10                               | 10                               | 49                               | 31                               | 65                               | 16                               |                                  |                                  |                            | 14          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                | 12                               | 8                                | 48                               | 29                               | 52                               | 15                               |                                  |                                  |                            | 15          |
|                                               |                                |                                |                                 | 4                                | 5                                | 3                                | 13                               | 8                                | 77                               | 48                               | 86                               | 21                               |                                  |                                  |                            | 16          |
|                                               |                                |                                |                                 | 4                                | 4                                | 6                                | 8                                | 11                               | 77                               | 48                               | 77                               | 15                               | 6                                |                                  |                            | 17          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 18          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 9                                | 7                                | 16                               |                                  |                                  |                                  |                                  |                            | 19          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 9                                | 6                                | 16                               | 7                                | 4                                |                                  |                                  |                            | 20          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 14                               | 6                                | 18                               | 7                                | 4                                |                                  |                                  |                            | 21          |
|                                               |                                |                                |                                 |                                  |                                  | 4                                | 12                               | 7                                | 15                               | 5                                | 4                                |                                  |                                  |                                  |                            | 22          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 10                               | 41                               | 5                                |                                  |                                  |                            | 23          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 10                               | 42                               | 5                                |                                  |                                  |                                  |                            | 24          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 16                               | 42                               | 7                                |                                  |                                  |                                  |                            | 25          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 16                               | 42                               | 7                                |                                  |                                  |                                  |                            | 26          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 16                               | 11                               |                                  |                                  |                            | 27          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 14                               | 13                               |                                  |                                  |                            | 28          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 9                                | 23                               | 17                               |                                  |                                  |                            | 29          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 7                                | 27                               | 13                               |                                  |                                  |                            | 30          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 31          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                |                                  | 2                                | 9                                | 3                                | 5                                |                                  |                                  |                                  |                            | 32          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                |                                  | 2                                | 8                                | 4                                | 4                                |                                  |                                  |                                  |                            | 33          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                |                                  | 2                                | 9                                | 1                                | 5                                |                                  |                                  |                                  |                            | 34          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 35          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 36          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 2                                |                                  |                            | 37          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                | 3                                |                            | 38          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 39          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 3                                | 1                                | 15                               |                            | 40          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                | 3                                | 14                               |                            | 41          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                | 3                                | 16                         | 42          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                | 4                                | 16                         | 43          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 2                          | 44          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 45          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 1                          | 46          |

# 358 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

TABLE P.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—

| Line No. | Occupation, district, and number of plants.     | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|-------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                                 |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Rollers, 8-inch—Con. Southern—<br>3 plants..... | 1913  | 5                    | 55.9                              | \$1.089                         | \$63.25                            | 2                                              | 1                    | 1               | 1  | 1                    | 1  | 1                    | 1  |
| 2        |                                                 | 1914  | 5                    | 55.9                              | .999                            | 57.93                              | 2                                              | 1                    | 1               | 1  | 1                    | 1  | 1                    | 1  |
| 3        |                                                 | 1915  | 5                    | 55.9                              | .690                            | 38.11                              | 2                                              | 1                    | 1               | 1  | 1                    | 1  | 1                    | 1  |
| 4        | Total—<br>15 plants.....                        | 1913  | 35                   | 58.0                              | 1.055                           | 62.31                              | 4                                              | 13                   | 4               | 2  | 11                   | 1  | 1                    | 1  |
| 5        |                                                 | 1914  | 34                   | 58.9                              | .943                            | 56.59                              | 4                                              | 10                   | 4               | 4  | 11                   | 1  | 1                    | 1  |
| 6        | 20 plants.....                                  | 1914  | 44                   | 59.1                              | .912                            | 54.60                              | 4                                              | 15                   | 3               | 5  | 16                   | 1  | 1                    | 1  |
| 7        |                                                 | 1915  | 43                   | 59.3                              | .987                            | 59.46                              | 8                                              | 9                    | 2               | 6  | 17                   | 1  | 1                    | 1  |
| 8        | Rollers, 9-inch: Eastern—<br>3 plants.....      | 1913  | 6                    | 60.2                              | .753                            | 45.51                              | 1                                              | 3                    | 2               | 1  | 1                    | 1  | 1                    | 1  |
| 9        |                                                 | 1914  | 6                    | 60.2                              | .653                            | 39.20                              | 1                                              | 3                    | 2               | 1  | 1                    | 1  | 1                    | 1  |
| 10       |                                                 | 1915  | 6                    | 60.2                              | .691                            | 41.51                              | 1                                              | 3                    | 2               | 1  | 1                    | 1  | 1                    | 1  |
| 11       | Pittsburgh—<br>5 plants.....                    | 1913  | 10                   | 60.7                              | .930                            | 57.23                              | 1                                              | 3                    | 1               | 4  | 1                    | 1  | 1                    | 1  |
| 12       |                                                 | 1914  | 10                   | 60.7                              | .854                            | 52.10                              | 1                                              | 3                    | 1               | 4  | 1                    | 1  | 1                    | 1  |
| 13       | 6 plants.....                                   | 1914  | 12                   | 60.3                              | .781                            | 47.52                              | 1                                              | 4                    | 1               | 5  | 1                    | 1  | 1                    | 1  |
| 14       |                                                 | 1915  | 12                   | 59.3                              | .851                            | 51.16                              | 3                                              | 2                    | 1               | 6  | 1                    | 1  | 1                    | 1  |
| 15       | G. L. and M. W.—<br>3 plants.....               | 1913  | 7                    | 67.8                              | 1.044                           | 70.04                              | 1                                              | 1                    | 1               | 5  | 1                    | 1  | 1                    | 1  |
| 16       |                                                 | 1914  | 7                    | 67.8                              | 1.022                           | 68.83                              | 1                                              | 1                    | 1               | 5  | 1                    | 1  | 1                    | 1  |
| 17       | 3 plants.....                                   | 1914  | 8                    | 66.3                              | 1.159                           | 76.75                              | 2                                              | 2                    | 2               | 6  | 1                    | 1  | 1                    | 1  |
| 18       |                                                 | 1915  | 8                    | 66.3                              | 1.213                           | 80.67                              | 2                                              | 2                    | 2               | 6  | 1                    | 1  | 1                    | 1  |
| 19       | Southern—<br>4 plants.....                      | 1913  | 6                    | 56.3                              | .890                            | 50.03                              | 2                                              | 4                    | 1               | 1  | 1                    | 1  | 1                    | 1  |
| 20       |                                                 | 1914  | 6                    | 56.3                              | .925                            | 52.03                              | 2                                              | 4                    | 1               | 1  | 1                    | 1  | 1                    | 1  |
| 21       |                                                 | 1915  | 6                    | 56.3                              | .919                            | 51.61                              | 2                                              | 4                    | 1               | 1  | 1                    | 1  | 1                    | 1  |
| 22       | Total—<br>15 plants.....                        | 1913  | 29                   | 61.4                              | .913                            | 56.41                              | 1                                              | 6                    | 4               | 5  | 11                   | 2  | 1                    | 1  |
| 23       |                                                 | 1914  | 29                   | 61.4                              | .868                            | 53.45                              | 1                                              | 6                    | 4               | 5  | 11                   | 2  | 1                    | 1  |
| 24       | 16 plants.....                                  | 1914  | 32                   | 61.0                              | .878                            | 54.11                              | 1                                              | 7                    | 4               | 6  | 13                   | 1  | 1                    | 1  |
| 25       |                                                 | 1915  | 32                   | 60.7                              | .924                            | 56.81                              | 3                                              | 5                    | 4               | 6  | 14                   | 1  | 1                    | 1  |
| 26       | Rollers, 10-inch: Eastern—<br>3 plants.....     | 1913  | 7                    | 52.6                              | .917                            | 48.22                              | 4                                              | 3                    | 1               | 1  | 1                    | 1  | 1                    | 1  |
| 27       |                                                 | 1914  | 7                    | 52.6                              | .832                            | 43.70                              | 4                                              | 3                    | 1               | 1  | 1                    | 1  | 1                    | 1  |
| 28       |                                                 | 1915  | 8                    | 54.8                              | .853                            | 47.02                              | 4                                              | 2                    | 1               | 2  | 1                    | 1  | 1                    | 1  |
| 29       | Pittsburgh—<br>5 plants.....                    | 1913  | 12                   | 66.8                              | 1.239                           | 83.41                              | 1                                              | 2                    | 2               | 7  | 1                    | 1  | 1                    | 1  |
| 30       |                                                 | 1914  | 12                   | 66.8                              | 1.205                           | 80.56                              | 1                                              | 2                    | 2               | 7  | 1                    | 1  | 1                    | 1  |
| 31       | 8 plants.....                                   | 1914  | 18                   | 63.3                              | 1.055                           | 67.98                              | 5                                              | 2                    | 2               | 9  | 1                    | 1  | 1                    | 1  |
| 32       |                                                 | 1915  | 18                   | 62.7                              | 1.004                           | 64.14                              | 3                                              | 2                    | 2               | 9  | 1                    | 1  | 1                    | 1  |
| 33       | G. L. and M. W.—<br>2 plants.....               | 1913  | 3                    | 54.0                              | 1.505                           | 80.71                              | 1                                              | 2                    | 1               | 1  | 1                    | 1  | 1                    | 1  |
| 34       |                                                 | 1914  | 3                    | 51.3                              | 1.249                           | 63.13                              | 1                                              | 2                    | 1               | 1  | 1                    | 1  | 1                    | 1  |
| 35       | 7 plants.....                                   | 1914  | 13                   | 58.0                              | 1.193                           | 70.72                              | 1                                              | 4                    | 2               | 1  | 5                    | 1  | 1                    | 1  |
| 36       |                                                 | 1915  | 13                   | 58.3                              | 1.083                           | 63.53                              | 1                                              | 5                    | 1               | 6  | 1                    | 1  | 1                    | 1  |
| 37       | Southern—<br>3 plants.....                      | 1913  | 5                    | 49.5                              | 1.053                           | 51.52                              | 2                                              | 2                    | 1               | 1  | 1                    | 1  | 1                    | 1  |
| 38       |                                                 | 1914  | 5                    | 49.5                              | .964                            | 47.37                              | 2                                              | 2                    | 1               | 1  | 1                    | 1  | 1                    | 1  |
| 39       |                                                 | 1915  | 5                    | 49.5                              | .976                            | 47.98                              | 2                                              | 2                    | 1               | 1  | 1                    | 1  | 1                    | 1  |
| 40       | Total—<br>13 plants.....                        | 1913  | 27                   | 58.5                              | 1.150                           | 68.08                              | 3                                              | 7                    | 6               | 2  | 7                    | 1  | 1                    | 1  |
| 41       |                                                 | 1914  | 27                   | 58.2                              | 1.069                           | 62.92                              | 3                                              | 7                    | 6               | 2  | 7                    | 1  | 1                    | 1  |
| 42       | 21 plants.....                                  | 1914  | 44                   | 58.6                              | 1.049                           | 62.64                              | 3                                              | 15                   | 5               | 3  | 16                   | 1  | 1                    | 1  |
| 43       |                                                 | 1915  | 44                   | 58.5                              | .999                            | 59.18                              | 6                                              | 13                   | 3               | 3  | 17                   | 1  | 1                    | 1  |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  | 4                          | 1           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  |                                  | 4                          | 2           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  | 2                                | 2                          | 3           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                | 6                                | 2                                | 25                         | 4           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 3                                | 3                                | 5                                | 22                         | 5           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 3                                | 3                                | 8                                | 29                         | 6           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 7                                | 32                         | 7           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 5                          | 8           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 1                                | 3                          | 9           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                | 4                          | 10          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 2                                | 1                                | 6                          | 11          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 1                                | 1                                | 6                          | 12          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 3                                | 1                                | 1                                | 6                          | 13          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 3                                |                                  | 7                          | 14          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 5                          | 15          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 5                          | 16          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 6                          | 17          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 6                          | 18          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  |                                  | 5                          | 19          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  |                                  | 5                          | 20          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  |                                  | 5                          | 21          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 4                                | 21                         | 22          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 3                                | 4                                | 19                         | 23          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 4                                | 3                                | 4                                | 20                         | 24          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 4                                | 3                                | 22                         | 25          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 7                          | 26          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 7                          | 27          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 8                          | 28          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 8                          | 29          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 12                         | 30          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 11                         | 31          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 14                         | 32          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                | 1                                | 15                         | 33          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                          | 34          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                          | 35          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  |                                  | 12                         | 36          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 2                                | 10                         | 37          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 5                          | 38          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 5                          | 39          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 5                          | 40          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 27          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 26                         | 41          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  | 4                                | 39                         | 42          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 2                                | 3                                | 38                         | 43          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 38                         | 44          |

TABLE P.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, 1913 TO 1915—

| Line No. | Occupation, district, and number of plants.                      | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |       |                      |       |                      |       |
|----------|------------------------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-------|----------------------|-------|----------------------|-------|
|          |                                                                  |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60    | Over 60 and under 72 | 72    | Over 72 and under 84 | 84    |
| 1        | Rollers, 12-inch: Eastern—<br>8 plants.....                      | 1913  | 15                   | 57.0                              | \$0.862                         | \$49.68                            | .....                                          | 8                    | 1               | 1     | 5                    | ..... | .....                | ..... |
| 2        |                                                                  | 1914  | 14                   | 57.3                              | .848                            | 48.60                              | .....                                          | 8                    | .....           | 1     | 5                    | ..... | .....                | ..... |
| 3        | 10 plants.....                                                   | 1914  | 18                   | 56.9                              | .877                            | 49.85                              | .....                                          | 11                   | .....           | 2     | 5                    | ..... | .....                | ..... |
| 4        |                                                                  | 1915  | 18                   | 56.6                              | .896                            | 50.52                              | .....                                          | 12                   | .....           | 1     | 5                    | ..... | .....                | ..... |
| 5        | Pittsburgh—<br>6 plants.....                                     | 1913  | 15                   | 63.5                              | .978                            | 61.68                              | 1                                              | 3                    | .....           | 1     | 7                    | 3     | .....                | ..... |
| 6        |                                                                  | 1914  | 14                   | 63.5                              | .704                            | 45.07                              | 1                                              | 3                    | .....           | 1     | 6                    | 3     | .....                | ..... |
| 7        | 7 plants.....                                                    | 1914  | 16                   | 63.6                              | .784                            | 50.27                              | 1                                              | 3                    | .....           | 1     | 8                    | 3     | .....                | ..... |
| 8        |                                                                  | 1915  | 16                   | 62.9                              | .982                            | 61.78                              | 3                                              | 1                    | .....           | 1     | 9                    | 2     | .....                | ..... |
| 9        | G. L. and M. W.—<br>3 plants.....                                | 1913  | 5                    | 69.6                              | .972                            | 67.23                              | .....                                          | .....                | .....           | 3     | 2                    | ..... | .....                | ..... |
| 10       |                                                                  | 1914  | 5                    | 69.6                              | .950                            | 65.77                              | .....                                          | .....                | .....           | 3     | 2                    | ..... | .....                | ..... |
| 11       | 5 plants.....                                                    | 1914  | 8                    | 64.5                              | 1.086                           | 67.67                              | 1                                              | 1                    | .....           | 4     | 2                    | ..... | .....                | ..... |
| 12       |                                                                  | 1915  | 7                    | 66.4                              | .922                            | 59.85                              | .....                                          | 1                    | .....           | 4     | 2                    | ..... | .....                | ..... |
| 13       | Southern—<br>2 plants.....                                       | 1913  | 3                    | 61.3                              | 1.037                           | 65.35                              | .....                                          | 1                    | .....           | 2     | .....                | ..... | .....                | ..... |
| 14       |                                                                  | 1914  | 2                    | 62.0                              | .881                            | 57.14                              | .....                                          | 1                    | .....           | ..... | 1                    | ..... | .....                | ..... |
| 15       |                                                                  | 1915  | 2                    | 62.0                              | .913                            | 58.19                              | .....                                          | 1                    | .....           | ..... | 1                    | ..... | .....                | ..... |
| 16       | Total—<br>19 plants.....                                         | 1913  | 38                   | 61.6                              | .936                            | 57.96                              | 1                                              | 12                   | 1               | 2     | 17                   | 5     | .....                | ..... |
| 17       |                                                                  | 1914  | 35                   | 61.8                              | .807                            | 50.13                              | 1                                              | 12                   | .....           | 2     | 14                   | 6     | .....                | ..... |
| 18       | 24 plants.....                                                   | 1914  | 44                   | 61.0                              | .881                            | 53.57                              | 2                                              | 16                   | .....           | 3     | 17                   | 6     | .....                | ..... |
| 19       |                                                                  | 1915  | 43                   | 60.8                              | .933                            | 56.58                              | 3                                              | 15                   | .....           | 2     | 18                   | 5     | .....                | ..... |
| 20       | Rollers, 13-inch, 14-inch, and 15-inch: Eastern—<br>1 plant..... | 1913  | 2                    | 72.0                              | .385                            | 27.72                              | .....                                          | .....                | .....           | ..... | .....                | 2     | .....                | ..... |
| 21       |                                                                  | 1914  | 2                    | 72.0                              | .385                            | 27.72                              | .....                                          | .....                | .....           | ..... | .....                | 2     | .....                | ..... |
| 22       | 3 plants.....                                                    | 1914  | 5                    | 64.3                              | .756                            | 46.97                              | .....                                          | 1                    | .....           | ..... | 2                    | ..... | .....                | ..... |
| 23       |                                                                  | 1915  | 6                    | 63.5                              | .666                            | 41.25                              | .....                                          | 1                    | .....           | 1     | 2                    | ..... | .....                | ..... |
| 24       | Pittsburgh—<br>2 plants.....                                     | 1913  | 5                    | 56.8                              | .875                            | 49.72                              | .....                                          | 3                    | .....           | 1     | .....                | 1     | .....                | ..... |
| 25       |                                                                  | 1914  | 5                    | 56.8                              | .705                            | 40.61                              | .....                                          | 3                    | .....           | 1     | .....                | 1     | .....                | ..... |
| 26       | G. L. and M. W.—<br>2 plants.....                                | 1915  | 5                    | 54.8                              | .719                            | 39.97                              | 3                                              | .....                | .....           | 1     | 1                    | ..... | .....                | ..... |
| 27       |                                                                  | 1913  | 3                    | 65.3                              | .570                            | 36.73                              | .....                                          | .....                | .....           | 1     | 2                    | ..... | .....                | ..... |
| 28       |                                                                  | 1914  | 3                    | 65.3                              | .610                            | 39.41                              | .....                                          | .....                | .....           | 1     | 2                    | ..... | .....                | ..... |
| 29       | Total—<br>5 plants.....                                          | 1915  | 3                    | 63.3                              | .673                            | 42.18                              | .....                                          | 1                    | .....           | ..... | 2                    | ..... | .....                | ..... |
| 30       |                                                                  | 1913  | 10                   | 62.4                              | .685                            | 41.42                              | .....                                          | 3                    | .....           | 2     | 2                    | 3     | .....                | ..... |
| 31       | 7 plants.....                                                    | 1914  | 10                   | 62.4                              | .612                            | 37.67                              | .....                                          | 3                    | .....           | 2     | 2                    | 3     | .....                | ..... |
| 32       |                                                                  | 1914  | 13                   | 61.6                              | .703                            | 42.78                              | .....                                          | 4                    | .....           | 2     | 4                    | 3     | .....                | ..... |
| 33       | Total—<br>14 plants.....                                         | 1915  | 14                   | 60.4                              | .686                            | 40.99                              | 3                                              | 2                    | .....           | 2     | 5                    | 2     | .....                | ..... |
| 34       | Rollers, 16-inch: Eastern—<br>3 plants.....                      | 1913  | 5                    | 60.4                              | .863                            | 52.57                              | .....                                          | .....                | 3               | 1     | 1                    | ..... | .....                | ..... |
| 35       |                                                                  | 1914  | 4                    | 61.1                              | 1.039                           | 64.29                              | .....                                          | .....                | 2               | 1     | 1                    | ..... | .....                | ..... |
| 36       | 3 plants.....                                                    | 1914  | 4                    | 62.7                              | 1.055                           | 66.30                              | .....                                          | .....                | 1               | 1     | 2                    | ..... | .....                | ..... |
| 37       |                                                                  | 1915  | 5                    | 61.6                              | .820                            | 50.36                              | .....                                          | .....                | 2               | ..... | 3                    | ..... | .....                | ..... |
| 38       | Pittsburgh—<br>2 plants.....                                     | 1913  | 4                    | 64.3                              | 1.173                           | 76.52                              | .....                                          | .....                | .....           | 1     | 3                    | ..... | .....                | ..... |
| 39       |                                                                  | 1914  | 3                    | 64.3                              | .888                            | 57.55                              | .....                                          | .....                | .....           | 1     | 2                    | ..... | .....                | ..... |
| 40       | 4 plants.....                                                    | 1914  | 6                    | 63.4                              | 1.040                           | 66.86                              | .....                                          | .....                | 1               | 1     | 4                    | ..... | .....                | ..... |
| 41       |                                                                  | 1915  | 6                    | 63.4                              | 1.097                           | 70.43                              | .....                                          | .....                | 1               | 1     | 4                    | ..... | .....                | ..... |
| 42       | G. L. and M. W.—<br>2 plants.....                                | 1913  | 6                    | 51.7                              | .970                            | 49.28                              | 3                                              | 2                    | .....           | ..... | .....                | 1     | .....                | ..... |
| 43       |                                                                  | 1914  | 6                    | 51.7                              | 1.056                           | 53.95                              | 3                                              | 2                    | .....           | ..... | .....                | 1     | .....                | ..... |
| 44       | 5 plants.....                                                    | 1914  | 11                   | 56.4                              | 1.052                           | 59.00                              | 3                                              | 3                    | .....           | 2     | 1                    | 2     | .....                | ..... |
| 45       |                                                                  | 1915  | 11                   | 56.4                              | .886                            | 52.80                              | 3                                              | 3                    | .....           | 2     | 1                    | 2     | .....                | ..... |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
*BAR MILLS*—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | Line<br>No. |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|-------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 13                               | 1           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 2                                | 2           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 3                                | 3           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 2                                | 4           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 5           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 1                                | 4                                | 6           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 1                                | 9                                | 7           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 14                               | 8           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 9           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 10          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  | 6                                | 11          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 12          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 13          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 14          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 15          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 1                                | 4                                | 16          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 8                                | 17          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 2                                | 9                                | 18          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 5                                | 19          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                                  | 20          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                                  | 21          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  | 3                                | 22          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 23          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 5                                | 24          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 25          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 26          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  | 1                                | 27          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 28          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 29          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                |                                  | 2                                | 30          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  | 2                                | 31          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  | 2                                | 32          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  | 7                                | 33          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 34          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 35          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 36          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 37          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 38          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 39          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  |                                  | 5                                | 40          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  | 5                                | 41          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 42          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 43          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 5                                |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 44          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                |                                  | 1                                | 7                                | 45          |

TABLE P.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, 1913 TO 1915—

| Line No. | Occupation, district, and number of plants.      | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |
|----------|--------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|
|          |                                                  |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 |
| 1        | Rollers, 16-inch—Con. Southern—<br>4 plants..... | 1913  | 6                    | 55.1                              | \$1.038                         | \$59.03                            | 2                                              | 2                    |                 | 1  | 1                    |    |                      |
| 2        |                                                  | 1914  | 5                    | 56.9                              | .979                            | 56.86                              | 1                                              | 2                    |                 | 1  | 1                    |    |                      |
| 3        |                                                  | 1915  | 5                    | 56.9                              | .925                            | 53.78                              | 1                                              | 2                    |                 | 1  | 1                    |    |                      |
| 4        | Total—<br>11 plants.....                         | 1913  | 21                   | 57.1                              | 1.003                           | 58.04                              | 5                                              | 4                    | 3               | 3  | 5                    | 1  |                      |
| 5        |                                                  | 1914  | 18                   | 57.3                              | 1.003                           | 57.66                              | 4                                              | 4                    | 2               | 3  | 4                    | 1  |                      |
| 6        | 16 plants.....                                   | 1914  | 26                   | 59.1                              | 1.036                           | 61.53                              | 4                                              | 5                    | 2               | 5  | 8                    | 2  |                      |
| 7        |                                                  | 1915  | 27                   | 59.0                              | .928                            | 56.45                              | 4                                              | 5                    | 3               | 4  | 9                    | 2  |                      |
| 8        | Rollers, 18-inch: Eastern—<br>2 plants.....      | 1913  | 4                    | 58.3                              | .663                            | 38.77                              |                                                | 1                    | 1               | 1  | 1                    |    |                      |
| 9        |                                                  | 1914  | 3                    | 59.7                              | .790                            | 46.63                              |                                                | 1                    |                 | 1  | 1                    |    |                      |
| 10       |                                                  | 1915  | 2                    | 59.5                              | .925                            | 53.80                              |                                                | 1                    |                 |    | 1                    |    |                      |
| 11       | Pittsburgh—<br>2 plants.....                     | 1913  | 3                    | 57.3                              | 1.276                           | 73.74                              |                                                | 1                    | 2               |    |                      |    |                      |
| 12       |                                                  | 1914  | 3                    | 57.3                              | 1.262                           | 72.50                              |                                                | 1                    | 2               |    |                      |    |                      |
| 13       |                                                  | 1915  | 3                    | 57.3                              | 1.059                           | 61.29                              |                                                | 1                    | 2               |    |                      |    |                      |
| 14       | G. L. and M. W.—<br>2 plants.....                | 1913  | 5                    | 50.7                              | 1.037                           | 54.84                              | 3                                              |                      |                 | 1  | 1                    |    |                      |
| 15       |                                                  | 1914  | 5                    | 50.7                              | .936                            | 49.78                              | 3                                              |                      |                 | 1  | 1                    |    |                      |
| 16       | 3 plants.....                                    | 1914  | 6                    | 51.7                              | 1.015                           | 54.82                              | 3                                              | 1                    |                 | 1  | 1                    |    |                      |
| 17       |                                                  | 1915  | 6                    | 52.1                              | 1.066                           | 60.18                              | 3                                              |                      | 1               | 1  | 1                    |    |                      |
| 18       | Southern—<br>1 plant.....                        | 1913  | 1                    | 52.0                              | .766                            | 39.83                              |                                                | 1                    |                 |    |                      |    |                      |
| 19       |                                                  | 1914  | 1                    | 52.0                              | .669                            | 34.79                              |                                                | 1                    |                 |    |                      |    |                      |
| 20       |                                                  | 1915  | 1                    | 52.0                              | .733                            | 38.12                              |                                                | 1                    |                 |    |                      |    |                      |
| 21       | Total—<br>7 plants.....                          | 1913  | 13                   | 54.7                              | .956                            | 53.10                              | 3                                              | 3                    | 3               | 2  | 2                    |    |                      |
| 22       |                                                  | 1914  | 12                   | 54.7                              | .959                            | 53.42                              | 3                                              | 3                    | 2               | 2  | 2                    |    |                      |
| 23       | 8 plants.....                                    | 1914  | 13                   | 54.9                              | .993                            | 55.47                              | 3                                              | 4                    | 2               | 2  | 2                    |    |                      |
| 24       |                                                  | 1915  | 12                   | 54.6                              | 1.013                           | 57.55                              | 3                                              | 3                    | 3               | 1  | 2                    |    |                      |
| 25       | Rollers, all sizes: Eastern—<br>12 plants.....   | 1913  | 45                   | 57.4                              | .811                            | 46.49                              |                                                | 13                   | 19              |    | 11                   | 2  |                      |
| 26       |                                                  | 1914  | 41                   | 57.7                              | .793                            | 45.59                              |                                                | 12                   | 17              |    | 10                   | 2  |                      |
| 27       | 15 plants.....                                   | 1914  | 53                   | 58.0                              | .823                            | 47.62                              |                                                | 17                   | 21              |    | 15                   |    |                      |
| 28       |                                                  | 1915  | 54                   | 57.9                              | .836                            | 48.04                              |                                                | 17                   | 20              |    | 17                   |    |                      |
| 29       | Pittsburgh—<br>11 plants.....                    | 1913  | 69                   | 61.7                              | 1.074                           | 66.90                              |                                                |                      | 28              |    | 41                   |    |                      |
| 30       |                                                  | 1914  | 67                   | 62.1                              | .933                            | 58.45                              |                                                |                      | 8               |    | 59                   |    |                      |
| 31       | 14 plants.....                                   | 1914  | 82                   | 61.7                              | .926                            | 57.87                              |                                                |                      | 8               |    | 74                   |    |                      |
| 32       |                                                  | 1915  | 82                   | 60.9                              | .987                            | 61.01                              |                                                | 5                    | 15              |    | 62                   |    |                      |
| 33       | G. L. and M. W.—<br>10 plants.....               | 1913  | 33                   | 60.3                              | 1.019                           | 60.86                              |                                                | 14                   |                 |    | 19                   |    |                      |
| 34       |                                                  | 1914  | 33                   | 60.1                              | .978                            | 58.35                              |                                                | 14                   |                 |    | 19                   |    |                      |
| 35       | 18 plants.....                                   | 1914  | 57                   | 59.7                              | 1.050                           | 62.86                              |                                                | 6                    | 32              |    | 19                   |    |                      |
| 36       |                                                  | 1915  | 55                   | 60.4                              | 1.014                           | 62.55                              |                                                | 6                    | 24              |    | 25                   |    |                      |
| 37       | Southern—<br>9 plants.....                       | 1913  | 26                   | 55.1                              | 1.006                           | 56.31                              |                                                | 17                   | 6               |    | 3                    |    |                      |
| 38       |                                                  | 1914  | 24                   | 55.2                              | .945                            | 53.00                              |                                                | 11                   | 11              |    | 2                    |    |                      |
| 39       |                                                  | 1915  | 24                   | 55.2                              | .876                            | 48.48                              |                                                | 11                   | 11              |    | 2                    |    |                      |
| 40       | Total—<br>42 plants.....                         | 1913  | 173                  | 59.3                              | .985                            | 58.85                              |                                                | 44                   | 53              |    | 74                   | 2  |                      |
| 41       |                                                  | 1914  | 165                  | 59.6                              | .909                            | 54.44                              |                                                | 37                   | 36              |    | 90                   | 2  |                      |
| 42       | 56 plants.....                                   | 1914  | 216                  | 59.6                              | .936                            | 56.13                              |                                                | 34                   | 72              |    | 110                  |    |                      |
| 43       |                                                  | 1915  | 215                  | 59.4                              | .944                            | 56.75                              |                                                | 39                   | 70              |    | 106                  |    |                      |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
*BAR MILLS*—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  |                                  | 5                          | 1           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 4                          | 2           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 5                          | 3           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 2                                | 1                                | 17                         | 4           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 15                         | 5           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  |                                  | 3                                | 22                         | 6           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 2                                |                                  | 21                         | 7           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                          | 8           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                          | 9           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                          | 10          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                          | 11          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                          | 12          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                          | 13          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 5                          | 14          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 5                          | 15          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 6                          | 16          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                          | 17          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 1                          | 18          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 19          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 1                          | 20          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 11                         | 21          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 11                         | 22          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 12                         | 23          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 10                         | 24          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 1                                | 3                                | 5                                | 34                         | 25          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 1                                | 4                                | 8                                | 29                         | 26          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 1                                | 3                                | 5                                | 38                         | 27          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  | 5                                | 44                         | 28          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                | 5                                | 3                                | 59                         | 29          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 5                                | 3                                | 11                               | 47                         | 30          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 6                                | 3                                | 14                               | 56                         | 31          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 5                                | 6                                | 9                                | 62                         | 32          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 4                                | 25                         | 33          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 6                                | 25                         | 34          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 3                                | 6                                | 46                         | 35          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 3                                | 3                                | 11                               | 38                         | 36          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 1                                | 1                                | 22                         | 37          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  | 3                                | 19                         | 38          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  | 2                                | 20                         | 39          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 6                                | 11                               | 13                               | 140                        | 40          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 8                                | 10                               | 24                               | 120                        | 41          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 5                                | 11                               | 10                               | 31                               | 159                        | 42          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 10                               | 12                               | 27                               | 164                        | 43          |

TABLE P.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, 1913 TO 1915—

| Line No. | Occupation, district, and number of plants.  | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|----------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                              |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Roughers, 8-inch: Eastern—<br>3 plants.....  | 1913  | 5                    | 54.1                              | \$0.283                         | \$15.27                            |                                                | 2                    | 3               |    |                      |    |                      |    |
| 2        |                                              | 1914  | 5                    | 54.1                              | .292                            | 15.87                              |                                                | 2                    | 3               |    |                      |    |                      |    |
| 3        | 5 plants.....                                | 1914  | 14                   | 56.9                              | .328                            | 18.66                              |                                                | 8                    | 2               |    | 4                    |    |                      |    |
| 4        |                                              | 1915  | 14                   | 56.9                              | .395                            | 22.37                              |                                                | 8                    | 2               |    | 4                    |    |                      |    |
| 5        | Pittsburgh—<br>3 plants.....                 | 1913  | 16                   | 61.3                              | .423                            | 25.55                              |                                                | 1                    | 10              |    | 5                    |    |                      |    |
| 6        |                                              | 1914  | 16                   | 63.0                              | .396                            | 24.63                              |                                                |                      | 8               | 1  | 7                    |    |                      |    |
| 7        | 4 plants.....                                | 1914  | 20                   | 63.6                              | .415                            | 26.21                              |                                                |                      | 8               | 1  | 11                   |    |                      |    |
| 8        |                                              | 1915  | 20                   | 63.2                              | .443                            | 27.67                              |                                                |                      | 8               | 1  | 11                   |    |                      |    |
| 9        | G. L. and M. W.—<br>2 plants.....            | 1913  | 8                    | 54.3                              | .428                            | 23.19                              |                                                | 8                    |                 |    |                      |    |                      |    |
| 10       |                                              | 1914  | 8                    | 45.6                              | .438                            | 19.94                              | 6                                              | 2                    |                 |    |                      |    |                      |    |
| 11       | 4 plants.....                                | 1914  | 14                   | 51.6                              | .423                            | 21.41                              | 6                                              |                      |                 |    | 4                    |    |                      |    |
| 12       |                                              | 1915  | 11                   | 61.1                              | .424                            | 25.88                              |                                                | 3                    |                 |    | 8                    |    |                      |    |
| 13       | Southern—<br>2 plants.....                   | 1913  | 3                    | 49.8                              | .545                            | 27.02                              | 2                                              |                      | 1               |    |                      |    |                      |    |
| 14       |                                              | 1914  | 3                    | 49.8                              | .520                            | 25.86                              | 2                                              |                      | 1               |    |                      |    |                      |    |
| 15       |                                              | 1915  | 4                    | 51.6                              | .449                            | 22.86                              | 2                                              |                      | 2               |    |                      |    |                      |    |
| 16       | Total—<br>10 plants.....                     | 1913  | 32                   | 57.3                              | .414                            | 23.49                              | 2                                              | 11                   | 14              |    | 5                    |    |                      |    |
| 17       |                                              | 1914  | 32                   | 56.0                              | .402                            | 22.21                              | 8                                              | 4                    | 12              | 1  | 7                    |    |                      |    |
| 18       | 15 plants.....                               | 1914  | 51                   | 57.7                              | .399                            | 22.80                              | 8                                              | 12                   | 11              | 1  | 19                   |    |                      |    |
| 19       |                                              | 1915  | 49                   | 60.0                              | .425                            | 25.36                              | 2                                              | 11                   | 12              | 1  | 23                   |    |                      |    |
| 20       | Roughers, 9-inch: Eastern—<br>3 plants.....  | 1913  | 10                   | 57.7                              | .362                            | 21.26                              |                                                | 6                    |                 |    | 4                    |    |                      |    |
| 21       |                                              | 1914  | 10                   | 57.7                              | .299                            | 17.30                              |                                                | 6                    |                 |    | 4                    |    |                      |    |
| 22       |                                              | 1915  | 10                   | 57.7                              | .281                            | 16.19                              |                                                | 6                    |                 |    | 4                    |    |                      |    |
| 23       | Pittsburgh—<br>5 plants.....                 | 1913  | 17                   | 62.5                              | .440                            | 27.37                              |                                                | 3                    | 4               |    | 10                   |    |                      |    |
| 24       |                                              | 1914  | 17                   | 62.5                              | .412                            | 25.38                              |                                                | 3                    | 4               |    | 10                   |    |                      |    |
| 25       | 6 plants.....                                | 1914  | 21                   | 61.7                              | .388                            | 23.70                              |                                                | 3                    | 8               |    | 10                   |    |                      |    |
| 26       |                                              | 1915  | 20                   | 60.6                              | .433                            | 26.17                              | 3                                              |                      | 8               |    | 9                    |    |                      |    |
| 27       | G. L. and M. W.—<br>3 plants.....            | 1913  | 10                   | 61.5                              | .607                            | 36.29                              |                                                | 4                    |                 |    | 4                    | 2  |                      |    |
| 28       |                                              | 1914  | 10                   | 61.5                              | .553                            | 33.45                              |                                                | 4                    |                 |    | 4                    | 2  |                      |    |
| 29       | 3 plants.....                                | 1914  | 12                   | 60.6                              | .579                            | 34.96                              |                                                | 4                    |                 |    | 8                    |    |                      |    |
| 30       |                                              | 1915  | 12                   | 60.6                              | .573                            | 34.69                              |                                                | 4                    |                 |    | 8                    |    |                      |    |
| 31       | Southern—<br>3 plants.....                   | 1913  | 6                    | 55.8                              | .388                            | 21.57                              |                                                | 3                    | 3               |    |                      |    |                      |    |
| 32       |                                              | 1914  | 5                    | 56.3                              | .413                            | 23.03                              |                                                | 2                    | 3               |    |                      |    |                      |    |
| 33       |                                              | 1915  | 5                    | 56.3                              | .418                            | 23.29                              |                                                | 2                    | 3               |    |                      |    |                      |    |
| 34       | Total—<br>14 plants.....                     | 1913  | 43                   | 60.2                              | .454                            | 27.21                              |                                                | 16                   | 7               |    | 18                   | 2  |                      |    |
| 35       |                                              | 1914  | 42                   | 60.4                              | .419                            | 25.10                              |                                                | 15                   | 7               |    | 18                   | 2  |                      |    |
| 36       | 15 plants.....                               | 1914  | 48                   | 60.0                              | .420                            | 25.11                              |                                                | 15                   | 11              |    | 22                   |    |                      |    |
| 37       |                                              | 1915  | 47                   | 59.5                              | .435                            | 25.92                              | 3                                              | 12                   | 11              |    | 21                   |    |                      |    |
| 38       | Roughers, 10-inch: Eastern—<br>4 plants..... | 1913  | 14                   | 54.1                              | .432                            | 23.16                              |                                                | 8                    | 6               |    |                      |    |                      |    |
| 39       |                                              | 1914  | 14                   | 54.1                              | .400                            | 21.43                              |                                                | 8                    | 6               |    |                      |    |                      |    |
| 40       | 4 plants.....                                | 1914  | 16                   | 56.1                              | .427                            | 23.98                              |                                                | 8                    | 4               |    | 4                    |    |                      |    |
| 41       |                                              | 1915  | 15                   | 56.3                              | .396                            | 22.37                              |                                                | 7                    | 4               |    | 4                    |    |                      |    |
| 42       | Pittsburgh—<br>5 plants.....                 | 1913  | 25                   | 59.0                              | .398                            | 23.28                              | 3                                              | 6                    | 4               |    | 12                   |    |                      |    |
| 43       |                                              | 1914  | 25                   | 58.9                              | .372                            | 21.47                              | 3                                              | 6                    | 4               |    | 12                   |    |                      |    |
| 44       | 7 plants.....                                | 1914  | 30                   | 59.7                              | .392                            | 23.19                              | 3                                              | 7                    | 4               |    | 16                   |    |                      |    |
| 45       |                                              | 1915  | 30                   | 59.0                              | .426                            | 24.87                              | 9                                              | 1                    | 4               |    | 16                   |    |                      |    |



AND FULL-TIME WEEKLY EARNINGS. IN EACH DISTRICT, BY YEARS,  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 3                                | 1                                |                                  |                                  |                                  |                            | 1           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 2                                |                                  |                                  |                                  |                            | 2           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 8                                | 2                                |                                  |                                  |                            | 3           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 11                               | 3                                |                                  |                                  |                            | 4           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 4                                | 2                                | 5                                | 1                                |                            | 5           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 6                                | 1                                | 5                                |                                  |                            | 6           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 6                                | 5                                | 5                                |                                  |                            | 7           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 4                                | 5                                | 3                                | 4                                |                            | 8           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 6                                |                                  |                                  |                            | 9           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 8                                |                                  |                                  |                            | 10          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 9                                |                                  | 1                                |                            | 11          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 6                                | 1                                |                                  |                            | 12          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                |                                  |                            | 13          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                |                                  |                            | 14          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 1                                | 1                                |                                  |                            | 15          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 3                                | 5                                | 7                                | 8                                | 8                                | 1                                |                            | 16          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 5                                | 8                                | 9                                | 8                                |                                  |                            | 17          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 6                                | 18                               | 16                               | 8                                | 1                                |                            | 18          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 21                               | 15                               | 5                                | 4                                |                            | 19          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 4                                | 4                                |                                  |                                  |                            | 20          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 8                                |                                  |                                  |                                  |                            | 21          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 6                                |                                  |                                  |                                  |                            | 22          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 4                                |                                  | 1                                | 4                                | 8                                |                                  |                            | 23          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 6                                | 4                                |                                  |                            | 24          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 4                                | 4                                | 3                                | 6                                | 4                                |                                  |                            | 25          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 10                               | 2                                | 2                                | 4                                |                            | 26          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  | 4                                | 4                          | 27          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  | 4                                |                                  |                            | 28          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 8                                | 4                                |                            | 29          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 10                               | 2                                |                            | 30          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  | 3                                | 1                                |                                  |                            | 31          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                |                                  | 2                                |                                  | 2                                |                                  |                            | 32          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 3                                |                                  |                                  | 2                                |                                  |                            | 33          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 8                                | 7                                | 11                               | 9                                | 4                                | 4                          | 34          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 5                                | 2                                | 15                               | 6                                | 10                               | 4                                |                            | 35          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 5                                | 6                                | 13                               | 6                                | 14                               | 4                                |                            | 36          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 4                                | 19                               | 2                                | 14                               | 6                                |                            | 37          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 3                                | 5                                |                                  |                            | 38          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 3                                | 5                                | 2                                |                                  |                            | 39          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 1                                | 7                                | 4                                |                                  |                            | 40          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 7                                | 8                                |                                  |                                  |                            | 41          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                | 14                               | 6                                | 3                                |                                  |                            | 42          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 18                               | 3                                | 3                                |                                  |                            | 43          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 19                               | 3                                | 7                                |                                  |                            | 44          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 11                               | 8                                | 8                                |                                  |                            | 45          |

TABLE P.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—

| Line No. | Occupation, district, and number of plants.                             | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|-------------------------------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                                                         |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Roughers, 10-inch—<br>Concluded.<br>G. L. and M. W.—<br>3 plants.....   | 1913  | 10                   | 55.1                              | \$0.608                         | \$33.47                            | 2                                              |                      | 8               |    |                      |    |                      |    |
| 2        |                                                                         | 1914  | 8                    | 52.7                              | .555                            | 29.30                              | 2                                              |                      | 6               |    |                      |    |                      |    |
| 3        | 8 plants.....                                                           | 1914  | 28                   | 58.7                              | .466                            | 27.15                              | 2                                              | 4                    | 10              |    | 12                   |    |                      |    |
| 4        |                                                                         | 1915  | 28                   | 58.7                              | .526                            | 31.01                              | 2                                              | 4                    | 12              |    | 10                   |    |                      |    |
| 5        | Southern—<br>2 plants.....                                              | 1913  | 8                    | 47.4                              | .511                            | 24.17                              | 4                                              | 4                    |                 |    |                      |    |                      |    |
| 6        |                                                                         | 1914  | 8                    | 47.4                              | .503                            | 23.84                              | 4                                              | 4                    |                 |    |                      |    |                      |    |
| 7        |                                                                         | 1915  | 8                    | 47.4                              | .513                            | 24.30                              | 4                                              | 4                    |                 |    |                      |    |                      |    |
| 8        | Total—<br>14 plants.....                                                | 1913  | 57                   | 55.4                              | .459                            | 25.17                              | 9                                              | 18                   | 18              |    | 12                   |    |                      |    |
| 9        |                                                                         | 1914  | 55                   | 55.1                              | .425                            | 22.94                              | 9                                              | 18                   | 16              |    | 12                   |    |                      |    |
| 10       | 21 plants.....                                                          | 1914  | 82                   | 57.4                              | .435                            | 24.76                              | 9                                              | 23                   | 18              |    | 32                   |    |                      |    |
| 11       |                                                                         | 1915  | 81                   | 57.2                              | .464                            | 26.47                              | 15                                             | 16                   | 20              |    | 30                   |    |                      |    |
| 12       | Roughers, 12-inch:<br>Eastern—<br>7 plants.....                         | 1913  | 22                   | 56.7                              | .430                            | 24.59                              |                                                | 15                   |                 |    | 7                    |    |                      |    |
| 13       |                                                                         | 1914  | 23                   | 57.0                              | .414                            | 23.51                              |                                                | 15                   |                 |    | 8                    |    |                      |    |
| 14       | 9 plants.....                                                           | 1914  | 29                   | 56.9                              | .429                            | 24.29                              |                                                | 17                   | 4               |    | 8                    |    |                      |    |
| 15       |                                                                         | 1915  | 29                   | 56.8                              | .387                            | 21.89                              |                                                | 17                   | 4               |    | 8                    |    |                      |    |
| 16       | Pittsburgh—<br>6 plants.....                                            | 1913  | 29                   | 66.2                              | .475                            | 31.25                              | 3                                              | 2                    |                 | 24 |                      |    |                      |    |
| 17       |                                                                         | 1914  | 27                   | 66.4                              | .385                            | 25.64                              |                                                | 3                    | 2               | 22 |                      |    |                      |    |
| 18       |                                                                         | 1915  | 27                   | 65.5                              | .432                            | 28.11                              | 3                                              |                      | 2               | 16 | 6                    |    |                      |    |
| 19       | G. L. and M. W.—<br>3 plants.....                                       | 1913  | 12                   | 58.0                              | .504                            | 29.04                              | 6                                              |                      |                 |    | 2                    | 4  |                      |    |
| 20       |                                                                         | 1914  | 12                   | 58.0                              | .509                            | 28.65                              | 6                                              |                      |                 |    | 2                    | 4  |                      |    |
| 21       | 6 plants.....                                                           | 1914  | 21                   | 56.5                              | .490                            | 27.05                              | 6                                              | 8                    |                 |    | 3                    | 4  |                      |    |
| 22       |                                                                         | 1915  | 23                   | 57.8                              | .449                            | 25.80                              | 6                                              | 8                    |                 |    | 3                    | 6  |                      |    |
| 23       | Southern—<br>4 plants.....                                              | 1913  | 11                   | 63.6                              | .441                            | 28.26                              |                                                |                      | 3               |    | 8                    |    |                      |    |
| 24       |                                                                         | 1914  | 9                    | 64.4                              | .371                            | 24.19                              |                                                |                      | 3               |    | 4                    | 2  |                      |    |
| 25       |                                                                         | 1915  | 9                    | 64.4                              | .296                            | 19.25                              |                                                |                      | 3               |    | 4                    | 2  |                      |    |
| 26       | Total—<br>20 plants.....                                                | 1913  | 74                   | 61.7                              | .461                            | 28.47                              | 6                                              | 18                   | 5               |    | 41                   | 4  |                      |    |
| 27       |                                                                         | 1914  | 71                   | 61.7                              | .414                            | 25.28                              | 6                                              | 18                   | 5               |    | 36                   | 6  |                      |    |
| 28       | 25 plants.....                                                          | 1914  | 86                   | 60.6                              | .424                            | 25.39                              | 6                                              | 28                   | 9               |    | 37                   | 6  |                      |    |
| 29       |                                                                         | 1915  | 88                   | 60.5                              | .408                            | 24.55                              | 9                                              | 25                   | 9               |    | 31                   | 14 |                      |    |
| 30       | Roughers, 13-inch,<br>14-inch, and 15 inch:<br>Eastern—<br>1 plant..... | 1913  | 2                    | 72.0                              | .422                            | 30.38                              |                                                |                      |                 |    |                      | 2  |                      |    |
| 31       |                                                                         | 1914  | 2                    | 72.0                              | .515                            | 37.08                              |                                                |                      |                 |    |                      | 2  |                      |    |
| 32       | 3 plants.....                                                           | 1914  | 8                    | 62.9                              | .561                            | 35.25                              |                                                |                      | 2               |    | 4                    | 2  |                      |    |
| 33       |                                                                         | 1915  | 10                   | 61.9                              | .487                            | 30.16                              |                                                |                      | 4               |    | 4                    | 2  |                      |    |
| 34       | Pittsburgh—<br>1 plant.....                                             | 1913  | 2                    | 66.0                              | .394                            | 25.97                              |                                                |                      |                 |    | 2                    |    |                      |    |
| 35       |                                                                         | 1914  | 2                    | 66.0                              | .352                            | 23.23                              |                                                |                      |                 |    | 2                    |    |                      |    |
| 36       |                                                                         | 1915  | 2                    | 65.0                              | .391                            | 25.42                              |                                                |                      |                 |    | 2                    |    |                      |    |
| 37       | G. L. and M. W.—<br>3 plants.....                                       | 1913  | 10                   | 53.2                              | .422                            | 21.78                              | 6                                              |                      |                 | 2  | 2                    |    |                      |    |
| 38       |                                                                         | 1914  | 10                   | 53.2                              | .426                            | 22.28                              | 6                                              |                      |                 | 2  | 2                    |    |                      |    |
| 39       |                                                                         | 1915  | 10                   | 52.0                              | .434                            | 22.59                              | 6                                              | 2                    |                 |    | 2                    |    |                      |    |
| 40       | Total—<br>5 plants.....                                                 | 1913  | 14                   | 57.7                              | .418                            | 23.61                              | 6                                              |                      |                 | 2  | 4                    | 2  |                      |    |
| 41       |                                                                         | 1914  | 14                   | 57.7                              | .428                            | 24.53                              | 6                                              |                      |                 | 2  | 4                    | 2  |                      |    |
| 42       | 7 plants.....                                                           | 1914  | 20                   | 58.4                              | .473                            | 27.56                              | 6                                              |                      | 2               | 2  | 8                    |    |                      |    |
| 43       |                                                                         | 1915  | 22                   | 57.7                              | .454                            | 26.29                              | 6                                              | 2                    | 4               |    | 8                    | 2  |                      |    |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No.    |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|----------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |                |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4<br>5                           | 6<br>2                           |                            | 1<br>2         |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 5                                | 3<br>2                           | 3<br>10                          | 15<br>4                          | 2<br>12                          |                            | 3<br>4         |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4<br>2                           | 4<br>6<br>8                      |                                  |                            | 5<br>6<br>7    |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1<br>2                           | 1<br>3                           | 20<br>21                         | 13<br>11                         | 16<br>16                         | 6<br>2                           |                            | 8<br>9         |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 8<br>3                           | 23<br>20                         | 15<br>26                         | 32<br>20                         | 2<br>12                          |                            | 10<br>11       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 1<br>1                           | 6<br>18                          | 10<br>2                          | 5<br>2                           |                                  | 2                          | 12<br>13       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 1<br>3                           | 18<br>16                         | 4<br>8                           | 2<br>2                           | 2<br>2                           | 2                          | 14<br>15       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 2<br>7                           | 20<br>15<br>17                   | 5<br>3                           | 2                                |                            | 16<br>17<br>18 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 6<br>8                           | 6<br>4                           |                                  |                            | 19<br>20       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3<br>2                           | 10<br>13                         | 4<br>6                           | 4                                |                            | 21<br>22       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 1<br>1                           | 2<br>6                           | 4<br>2                           | 4                                |                                  |                            | 23<br>24       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 4                                | 1                                | 2<br>2                           | 2<br>2                           |                                  |                                  |                            | 25             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2<br>8                           | 10<br>30                         | 40<br>25                         | 20<br>2                          | 2<br>4                           | 2                          | 26<br>27       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 8<br>6                           | 33<br>27                         | 31<br>40                         | 6<br>9                           | 6<br>2                           | 2                          | 28<br>29       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |                |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                |                                  |                            | 30<br>31       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2<br>4                           | 2<br>4                           | 4                                |                            | 32<br>33       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1<br>2<br>2                      | 1                                |                                  |                                  |                            | 34<br>35<br>36 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4<br>4<br>2                      | 6<br>6<br>8                      |                                  |                                  |                            | 37<br>38<br>39 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 5<br>6                           | 9<br>6                           | 2                                |                                  |                            | 40<br>41       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 6<br>6                           | 8<br>12                          | 2<br>4                           | 4                                |                            | 42<br>43       |

## 368 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

TABLE P.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, 1913 TO 1915—

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
|          | Roughers, 16-inch: Eastern—                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 1        | 4 plants.....                               | 1913  | 11                   | 59.5                              | 80.355                          | \$21.19                            |                                                | 1                    | 6               |    | 4                    |    |                      |    |
| 2        |                                             | 1914  | 9                    | 59.9                              | .405                            | 24.50                              |                                                | 1                    | 4               |    | 4                    |    |                      |    |
| 3        | 4 plants.....                               | 1914  | 9                    | 61.2                              | .438                            | 27.07                              |                                                | 1                    | 2               |    | 6                    |    |                      |    |
| 4        |                                             | 1915  | 11                   | 60.6                              | .419                            | 25.53                              |                                                | 1                    | 4               |    | 6                    |    |                      |    |
| 5        | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 6        | 3 plants.....                               | 1913  | 12                   | 66.8                              | .507                            | 33.97                              |                                                |                      |                 |    | 8                    | 4  |                      |    |
|          |                                             | 1914  | 10                   | 67.4                              | .396                            | 26.81                              |                                                |                      |                 |    | 6                    | 4  |                      |    |
| 7        | 5 plants.....                               | 1914  | 17                   | 65.9                              | .522                            | 34.26                              |                                                |                      | 1               |    | 12                   | 4  |                      |    |
| 8        |                                             | 1915  | 17                   | 65.9                              | .554                            | 36.41                              |                                                |                      | 1               |    | 12                   | 4  |                      |    |
| 9        | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 10       | 3 plants.....                               | 1913  | 13                   | 54.5                              | .481                            | 25.50                              | 6                                              | 2                    |                 |    | 5                    |    |                      |    |
|          |                                             | 1914  | 13                   | 54.5                              | .497                            | 26.20                              | 6                                              | 2                    |                 |    | 5                    |    |                      |    |
| 11       | 6 plants.....                               | 1914  | 23                   | 57.8                              | .489                            | 27.44                              | 6                                              | 4                    |                 |    | 13                   |    |                      |    |
| 12       |                                             | 1915  | 23                   | 57.8                              | .360                            | 20.78                              | 6                                              | 4                    |                 |    | 13                   |    |                      |    |
| 13       | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 14       | 4 plants.....                               | 1913  | 15                   | 55.9                              | .375                            | 21.03                              | 4                                              | 3                    | 4               |    | 4                    |    |                      |    |
|          |                                             | 1914  | 12                   | 57.6                              | .403                            | 22.81                              | 2                                              | 2                    | 4               |    | 4                    |    |                      |    |
| 15       |                                             | 1915  | 12                   | 57.6                              | .396                            | 22.43                              | 2                                              | 2                    | 4               |    | 4                    |    |                      |    |
| 16       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 17       | 14 plants.....                              | 1913  | 51                   | 58.9                              | .429                            | 25.24                              | 10                                             | 6                    | 10              |    | 21                   | 4  |                      |    |
|          |                                             | 1914  | 44                   | 59.4                              | .420                            | 25.07                              | 8                                              | 5                    | 8               |    | 19                   | 4  |                      |    |
| 18       | 19 plants.....                              | 1914  | 61                   | 60.5                              | .473                            | 28.37                              | 8                                              | 7                    | 7               |    | 35                   | 4  |                      |    |
| 19       |                                             | 1915  | 63                   | 60.4                              | .430                            | 26.14                              | 8                                              | 7                    | 9               |    | 35                   | 4  |                      |    |
|          | Roughers, 18 inch: Eastern—                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 20       | 6 plants.....                               | 1913  | 16                   | 56.0                              | .469                            | 26.29                              |                                                | 12                   |                 |    | 4                    |    |                      |    |
| 21       |                                             | 1914  | 14                   | 56.3                              | .423                            | 23.38                              |                                                | 10                   |                 |    | 4                    |    |                      |    |
| 22       |                                             | 1915  | 13                   | 56.3                              | .518                            | 28.59                              |                                                | 9                    |                 |    | 4                    |    |                      |    |
| 23       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 24       | 3 plants.....                               | 1913  | 8                    | 55.4                              | .520                            | 28.98                              |                                                | 4                    | 4               |    |                      |    |                      |    |
|          |                                             | 1914  | 8                    | 55.4                              | .450                            | 25.24                              |                                                | 4                    | 4               |    |                      |    |                      |    |
| 25       | 3 plants.....                               | 1914  | 11                   | 54.1                              | .423                            | 23.19                              |                                                | 7                    | 4               |    |                      |    |                      |    |
| 26       |                                             | 1915  | 11                   | 52.6                              | .392                            | 20.94                              | 6                                              | 1                    | 4               |    |                      |    |                      |    |
| 27       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 28       | 2 plants.....                               | 1913  | 7                    | 54.1                              | .578                            | 30.69                              | 3                                              |                      |                 |    | 4                    |    |                      |    |
|          |                                             | 1914  | 7                    | 54.1                              | .561                            | 30.27                              | 3                                              |                      |                 |    | 4                    |    |                      |    |
| 29       | 3 plants.....                               | 1914  | 9                    | 54.7                              | .538                            | 29.30                              | 3                                              |                      | 2               |    | 4                    |    |                      |    |
| 30       |                                             | 1915  | 9                    | 55.3                              | .556                            | 31.10                              | 3                                              |                      | 2               |    | 4                    |    |                      |    |
| 31       | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 32       | 2 plants.....                               | 1913  | 3                    | 56.0                              | .473                            | 26.56                              |                                                | 1                    | 2               |    |                      |    |                      |    |
|          |                                             | 1914  | 3                    | 56.0                              | .425                            | 23.84                              |                                                | 1                    | 2               |    |                      |    |                      |    |
| 33       |                                             | 1915  | 3                    | 56.0                              | .415                            | 23.14                              |                                                | 1                    | 2               |    |                      |    |                      |    |
| 34       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 35       | 13 plants.....                              | 1913  | 34                   | 55.5                              | .504                            | 27.85                              | 3                                              | 17                   | 6               |    | 8                    |    |                      |    |
|          |                                             | 1914  | 32                   | 55.5                              | .460                            | 25.40                              | 3                                              | 15                   | 6               |    | 8                    |    |                      |    |
| 36       | 14 plants.....                              | 1914  | 37                   | 55.2                              | .451                            | 24.80                              | 3                                              | 18                   | 8               |    | 8                    |    |                      |    |
| 37       |                                             | 1915  | 36                   | 54.9                              | .480                            | 26.43                              | 9                                              | 11                   | 8               |    | 8                    |    |                      |    |
|          | Roughers, all sizes: Eastern—               |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 38       | 12 plants.....                              | 1913  | 80                   | 56.8                              | .410                            | 23.36                              |                                                | 19                   | 59              |    |                      | 2  |                      |    |
| 39       |                                             | 1914  | 77                   | 57.0                              | .392                            | 22.27                              |                                                | 19                   | 56              |    |                      | 2  |                      |    |
| 40       | 15 plants.....                              | 1914  | 100                  | 57.6                              | .412                            | 23.75                              |                                                |                      | 83              |    | 17                   |    |                      |    |
| 41       |                                             | 1915  | 102                  | 57.7                              | .409                            | 23.52                              |                                                |                      | 81              |    | 21                   |    |                      |    |
| 42       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 43       | 11 plants.....                              | 1913  | 109                  | 62.5                              | .450                            | 28.02                              |                                                | 8                    | 25              |    | 76                   |    |                      |    |
|          |                                             | 1914  | 105                  | 62.7                              | .393                            | 24.49                              |                                                | 8                    | 25              |    | 72                   |    |                      |    |
| 44       | 14 plants.....                              | 1914  | 128                  | 62.5                              | .413                            | 25.74                              |                                                | 11                   | 30              |    | 87                   |    |                      |    |
| 45       |                                             | 1915  | 127                  | 61.8                              | .444                            | 27.42                              |                                                | 11                   | 30              |    | 80                   |    |                      |    |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 2                                | 5                                |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 5                                |                                  |                                  |                            | 2           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 7                                |                                  |                                  |                            | 3           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 6                                | 1                                |                                  |                            | 4           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 6                                |                                  |                            | 5           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 6                                |                                  |                                  |                            | 6           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 5                                | 6                                | 2                                | 2                                | 2                          | 7           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 7                                | 4                                | 2                                | 2                                | 2                          | 8           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 1                                | 8                                |                                  |                            | 9           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 8                                | 8                                | 1                                |                            | 10          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 4                                | 11                               | 1                                | 1                          | 11          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 14                               | 5                                |                                  |                                  |                            | 12          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 11                               | 4                                |                                  |                                  |                            | 13          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                |                                  | 6                                | 2                                |                                  |                            | 14          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 4                                | 2                                | 1                                | 1                                |                            | 15          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 17                               | 16                               | 14                               |                                  |                            | 16          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 12                               | 17                               | 10                               | 1                                |                            | 17          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 13                               | 23                               | 15                               | 3                                | 3                          | 18          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 8                                | 29                               | 17                               | 4                                | 3                                | 2                          | 19          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 8                                | 2                                | 2                          | 20          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 6                                | 5                                | 1                                |                            | 21          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 3                                | 2                                | 4                                | 1                          | 22          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 2                                | 3                                | 2                                |                            | 23          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 1                                | 4                                |                                  |                            | 24          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 1                                | 4                                |                                  |                            | 25          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 5                                | 2                                | 2                                |                                  |                            | 26          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 3                                |                            | 27          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 7                                |                                  |                            | 28          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 7                                |                                  |                            | 29          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 3                                | 4                                |                            | 30          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 1                                |                                  |                            | 31          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                |                                  |                                  |                            | 32          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 1                                |                                  |                                  |                            | 33          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 3                                | 12                               | 10                               | 7                                |                            | 34          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 9                                | 4                                | 16                               | 1                                |                            | 35          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 12                               | 6                                | 16                               | 1                                |                            | 36          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 10                               | 6                                | 7                                | 8                                | 1                          | 37          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 12                               | 21                               | 32                               | 12                               | 2                          | 38          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 10                               | 41                               | 10                               | 11                               | 1                          | 39          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 11                               | 43                               | 22                               | 13                               | 7                          | 40          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 7                                | 49                               | 30                               | 7                                | 6                          | 41          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 7                                | 23                               | 41                               | 30                               | 5                          | 42          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 9                                | 42                               | 32                               | 16                               |                            | 43          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 13                               | 47                               | 36                               | 22                               | 2                          | 44          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 11                               | 46                               | 38                               | 20                               | 10                         | 45          |

# 370 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

TABLE P.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUPE,  
1913 TO 1915—

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Roughers, all sizes—                        |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 2        | Concluded.                                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
|          | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
|          | 12 plants.....                              | 1913  | 70                   | 55.9                              | \$0.516                         | \$28.51                            |                                                | 48                   | 12              |    | 10                   |    |                      |    |
|          |                                             | 1914  | 68                   | 54.7                              | .503                            | 27.17                              | 8                                              | 38                   | 12              |    | 10                   |    |                      |    |
| 3        | 19 plants.....                              | 1914  | 117                  | 56.7                              | .483                            | 27.05                              |                                                | 33                   | 72              |    | 12                   |    |                      |    |
| 4        |                                             | 1915  | 116                  | 57.9                              | .468                            | 27.12                              |                                                | 19                   | 74              |    | 23                   |    |                      |    |
|          | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 5        | 9 plants.....                               | 1913  | 46                   | 55.9                              | .434                            | 24.12                              | 8                                              | 24                   | 3               |    | 11                   |    |                      |    |
| 6        |                                             | 1914  | 40                   | 56.2                              | .427                            | 23.66                              | 8                                              | 3                    | 20              |    | 9                    |    |                      |    |
| 7        |                                             | 1915  | 41                   | 56.2                              | .406                            | 22.30                              | 8                                              | 4                    | 20              |    | 9                    |    |                      |    |
|          | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 8        | 44 plants.....                              | 1913  | 305                  | 58.5                              | .452                            | 26.32                              | 8                                              | 99                   | 99              |    | 97                   | 2  |                      |    |
| 9        |                                             | 1914  | 290                  | 58.4                              | .423                            | 24.42                              | 16                                             | 68                   | 113             |    | 91                   | 2  |                      |    |
| 10       | 57 plants.....                              | 1914  | 385                  | 58.8                              | .436                            | 25.41                              | 8                                              | 47                   | 205             |    | 125                  |    |                      |    |
| 11       |                                             | 1915  | 386                  | 58.9                              | .438                            | 25.76                              | 8                                              | 34                   | 205             |    | 139                  |    |                      |    |
|          | Catchers, 8-inch:                           |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
|          | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 12       | 3 plants.....                               | 1913  | 4                    | 53.3                              | .284                            | 15.02                              |                                                | 2                    | 2               |    |                      |    |                      |    |
| 13       |                                             | 1914  | 4                    | 53.3                              | .287                            | 15.32                              |                                                | 2                    | 2               |    |                      |    |                      |    |
|          | 5 plants.....                               | 1914  | 9                    | 55.8                              | .336                            | 18.76                              |                                                |                      | 1               |    | 2                    |    |                      |    |
| 14       |                                             | 1915  | 9                    | 55.8                              | .406                            | 22.58                              |                                                | 6                    | 1               |    | 2                    |    |                      |    |
|          | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 16       | 3 plants.....                               | 1913  | 14                   | 59.9                              | .443                            | 26.27                              |                                                |                      | 12              |    | 2                    |    |                      |    |
| 17       |                                             | 1914  | 14                   | 63.9                              | .374                            | 23.66                              |                                                |                      | 4               |    | 10                   |    |                      |    |
|          | 4 plants.....                               | 1914  | 16                   | 64.1                              | .388                            | 24.76                              |                                                |                      | 4               |    | 12                   |    |                      |    |
| 18       |                                             | 1915  | 16                   | 63.9                              | .429                            | 27.19                              |                                                |                      | 4               |    | 12                   |    |                      |    |
|          | G. L. & M. W.—                              |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 20       | 2 plants.....                               | 1913  | 4                    | 54.3                              | .428                            | 23.19                              |                                                | 4                    |                 |    |                      |    |                      |    |
| 21       |                                             | 1914  | 4                    | 45.6                              | .438                            | 19.94                              | 3                                              | 1                    |                 |    |                      |    |                      |    |
|          | 4 plants.....                               | 1914  | 10                   | 54.0                              | .417                            | 22.00                              | 3                                              | 3                    |                 |    | 4                    |    |                      |    |
| 22       |                                             | 1915  | 10                   | 61.7                              | .429                            | 26.40                              |                                                | 2                    |                 |    | 8                    |    |                      |    |
|          | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 24       | 2 plants.....                               | 1913  | 3                    | 49.8                              | .545                            | 27.02                              | 2                                              |                      | 1               |    |                      |    |                      |    |
| 25       |                                             | 1914  | 3                    | 49.8                              | .520                            | 25.86                              | 2                                              |                      | 1               |    |                      |    |                      |    |
| 26       |                                             | 1915  | 3                    | 49.8                              | .468                            | 23.03                              | 2                                              |                      | 1               |    |                      |    |                      |    |
|          | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 27       | 10 plants.....                              | 1913  | 25                   | 56.7                              | .427                            | 24.06                              | 2                                              | 6                    | 15              |    | 2                    |    |                      |    |
| 28       |                                             | 1914  | 25                   | 57.6                              | .387                            | 21.99                              | 5                                              | 3                    | 7               |    | 10                   |    |                      |    |
| 29       | 15 plants.....                              | 1914  | 38                   | 55.4                              | .394                            | 22.70                              | 5                                              | 9                    | 6               |    | 18                   |    |                      |    |
| 30       |                                             | 1915  | 38                   | 60.3                              | .427                            | 25.56                              | 2                                              | 8                    | 6               |    | 22                   |    |                      |    |
|          | Catchers, 9-inch:                           |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
|          | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 31       | 3 plants.....                               | 1913  | 6                    | 56.8                              | .322                            | 18.79                              |                                                | 4                    |                 |    | 2                    |    |                      |    |
| 32       |                                             | 1914  | 6                    | 56.8                              | .270                            | 15.49                              |                                                | 4                    |                 |    | 2                    |    |                      |    |
| 33       |                                             | 1915  | 6                    | 56.8                              | .255                            | 14.57                              |                                                | 4                    |                 |    | 2                    |    |                      |    |
|          | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 34       | 5 plants.....                               | 1913  | 10                   | 60.7                              | .438                            | 26.49                              |                                                | 3                    | 2               |    | 5                    |    |                      |    |
| 35       |                                             | 1914  | 10                   | 60.7                              | .414                            | 24.82                              |                                                | 3                    | 2               |    | 5                    |    |                      |    |
|          | 6 plants.....                               | 1914  | 12                   | 60.3                              | .393                            | 23.44                              |                                                | 3                    | 4               |    | 5                    |    |                      |    |
| 36       |                                             | 1915  | 12                   | 59.3                              | .420                            | 24.97                              | 3                                              |                      | 4               |    | 5                    |    |                      |    |
|          | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 38       | 3 plants.....                               | 1913  | 9                    | 60.3                              | .640                            | 37.83                              |                                                | 4                    |                 |    | 4                    | 1  |                      |    |
| 39       |                                             | 1914  | 9                    | 60.3                              | .577                            | 34.42                              |                                                | 4                    |                 |    | 4                    | 1  |                      |    |
|          | 3 plants.....                               | 1914  | 12                   | 60.6                              | .579                            | 34.96                              |                                                | 4                    |                 |    | 8                    |    |                      |    |
| 40       |                                             | 1915  | 12                   | 60.6                              | .573                            | 34.69                              |                                                | 4                    |                 |    | 8                    |    |                      |    |
|          | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 42       | 3 plants.....                               | 1913  | 5                    | 56.3                              | .408                            | 22.80                              |                                                | 2                    | 3               |    |                      |    |                      |    |
| 43       |                                             | 1914  | 5                    | 56.3                              | .413                            | 23.03                              |                                                | 2                    | 3               |    |                      |    |                      |    |
| 44       |                                             | 1915  | 5                    | 56.3                              | .429                            | 23.93                              |                                                | 2                    | 3               |    |                      |    |                      |    |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No.    |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|----------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |                |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 12<br>10                         | 19<br>23                         | 22<br>24                         | 13<br>11                         | 4                          | 1<br>2         |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 5<br>6                           | 20<br>24                         | 34<br>44                         | 45<br>24                         | 12<br>18                         | 1                          | 3<br>4         |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 3<br>1                           | 13<br>5                          | 17<br>8                          | 13<br>13                         |                                  |                            | 5<br>6         |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 4<br>4                           | 5<br>5                           | 13<br>13                         | 6<br>6                           | 12<br>12                         | 1                                |                            | 7              |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 4<br>9                           | 22<br>24                         | 69<br>101                        | 109<br>78                        | 77<br>64                         | 20<br>12                         | 4                          | 8<br>9         |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 9<br>6                           | 34<br>29                         | 118<br>132                       | 105<br>118                       | 93<br>63                         | 21<br>35                         | 5<br>3                     | 10<br>11       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 2<br>3                           | 1                                |                                  |                                  |                                  |                            | 12<br>13       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 4<br>6                           | 2<br>3                           |                                  |                                  |                            | 14<br>15       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1<br>1                           | 1<br>1                           | 2<br>10                          | 6                                | 4<br>2                           |                                  |                            | 16<br>17       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 1<br>2                           | 10<br>6                          | 2<br>5                           | 2<br>1                           | 2                                |                            | 18<br>19       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 3<br>4                           |                                  |                                  |                            | 20<br>21       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4<br>3                           | 5<br>6                           |                                  | 1                                |                            | 22<br>23       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3<br>3                           |                                  |                            | 24<br>25       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                | 1                                |                                  |                            | 26             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2<br>1                           | 3<br>4                           | 4<br>11                          | 9<br>4                           | 7<br>5                           |                                  |                            | 27<br>28       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 4<br>2                           | 18<br>16                         | 9<br>15                          | 5<br>3                           | 1<br>2                           |                            | 29<br>30       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2<br>2<br>3                      | 2<br>2<br>2                      |                                  | 2<br>1                           |                                  |                                  |                            | 31<br>32<br>33 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 1<br>2                           | 3<br>4                           | 4<br>2                           |                                  |                            | 34<br>35       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 2<br>1                           | 2<br>7                           | 4<br>1                           | 2<br>1                           |                                  | 2                          | 36<br>37       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1<br>1                           |                                  |                                  |                                  | 4<br>4                     | 38<br>39       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 8<br>10                          |                                  | 4<br>2                     | 40<br>41       |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                |                                  | 3                                | 1<br>2                           |                                  |                            | 42<br>43<br>44 |

TABLE P.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
|          | Catchers, 9-inch—Con.                       |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 1        | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 2        | 14 plants.....                              | 1913  | 30                   | 59.1                              | \$0.470                         | \$27.74                            |                                                | 13                   | 5               |    | 11                   | 1  |                      |    |
|          |                                             | 1914  | 30                   | 59.1                              | .434                            | 25.54                              |                                                | 13                   | 5               |    | 11                   | 1  |                      |    |
| 3        | 15 plants.....                              | 1914  | 35                   | 59.2                              | .438                            | 25.97                              |                                                | 13                   | 7               |    | 15                   |    |                      |    |
| 4        |                                             | 1915  | 35                   | 58.9                              | .446                            | 26.37                              | 3                                              | 10                   | 7               |    | 15                   |    |                      |    |
|          | Catchers, 10-inch:                          |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 5        | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 6        | 4 plants.....                               | 1913  | 9                    | 52.9                              | .442                            | 23.16                              |                                                | 6                    | 3               |    |                      |    |                      |    |
|          |                                             | 1914  | 9                    | 52.9                              | .411                            | 21.54                              |                                                | 6                    | 3               |    |                      |    |                      |    |
| 7        | 4 plants.....                               | 1914  | 10                   | 54.7                              | .432                            | 23.57                              |                                                | 6                    | 2               |    | 2                    |    |                      |    |
| 8        |                                             | 1915  | 10                   | 54.7                              | .402                            | 21.97                              |                                                | 6                    | 2               |    | 2                    |    |                      |    |
| 9        | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 10       | 4 plants.....                               | 1913  | 18                   | 60.4                              | .370                            | 22.46                              |                                                | 6                    | 4               |    | 8                    |    |                      |    |
|          |                                             | 1914  | 18                   | 60.4                              | .358                            | 21.48                              |                                                | 6                    | 4               |    | 8                    |    |                      |    |
| 11       | 6 plants.....                               | 1914  | 23                   | 61.1                              | .388                            | 23.73                              |                                                | 7                    | 4               |    | 12                   |    |                      |    |
| 12       |                                             | 1915  | 23                   | 60.2                              | .410                            | 24.63                              | 6                                              | 1                    | 4               |    | 12                   |    |                      |    |
| 13       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 14       | 3 plants.....                               | 1913  | 8                    | 54.6                              | .604                            | 32.93                              | 2                                              |                      | 6               |    |                      |    |                      |    |
|          |                                             | 1914  | 6                    | 51.2                              | .567                            | 29.23                              | 2                                              |                      | 4               |    |                      |    |                      |    |
| 15       | 8 plants.....                               | 1914  | 25                   | 58.5                              | .471                            | 27.33                              | 2                                              | 4                    | 8               |    | 11                   |    |                      |    |
| 16       |                                             | 1915  | 23                   | 58.5                              | .535                            | 31.59                              | 2                                              | 4                    | 8               |    | 9                    |    |                      |    |
| 17       | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 18       | 2 plants.....                               | 1913  | 6                    | 47.0                              | .526                            | 24.68                              | 4                                              | 2                    |                 |    |                      |    |                      |    |
| 19       |                                             | 1914  | 6                    | 47.0                              | .504                            | 23.68                              | 4                                              | 2                    |                 |    |                      |    |                      |    |
|          |                                             | 1915  | 6                    | 47.0                              | .510                            | 23.99                              | 4                                              | 2                    |                 |    |                      |    |                      |    |
| 20       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 21       | 13 plants.....                              | 1913  | 41                   | 55.7                              | .454                            | 24.98                              | 6                                              | 14                   | 13              |    | 8                    |    |                      |    |
|          |                                             | 1914  | 39                   | 55.2                              | .425                            | 23.03                              | 6                                              | 14                   | 11              |    | 8                    |    |                      |    |
| 22       | 20 plants.....                              | 1914  | 64                   | 57.7                              | .438                            | 25.11                              | 6                                              | 19                   | 14              |    | 25                   |    |                      |    |
| 23       |                                             | 1915  | 62                   | 57.4                              | .465                            | 26.72                              | 12                                             | 13                   | 14              |    | 23                   |    |                      |    |
|          | Catchers, 12-inch:                          |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 24       | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 25       | 6 plants.....                               | 1913  | 13                   | 57.7                              | .440                            | 25.67                              |                                                | 8                    |                 |    | 5                    |    |                      |    |
|          |                                             | 1914  | 14                   | 58.2                              | .403                            | 23.36                              |                                                | 8                    |                 |    | 6                    |    |                      |    |
| 26       | 8 plants.....                               | 1914  | 20                   | 57.7                              | .429                            | 24.54                              |                                                | 10                   | 4               |    | 6                    |    |                      |    |
| 27       |                                             | 1915  | 20                   | 57.6                              | .406                            | 23.28                              |                                                | 10                   | 4               |    | 6                    |    |                      |    |
| 28       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 29       | 6 plants.....                               | 1913  | 21                   | 65.4                              | .440                            | 28.63                              |                                                | 3                    | 2               |    | 16                   |    |                      |    |
| 30       |                                             | 1914  | 20                   | 65.5                              | .348                            | 22.91                              |                                                | 3                    | 2               |    | 15                   |    |                      |    |
|          |                                             | 1915  | 20                   | 64.6                              | .401                            | 25.68                              | 3                                              |                      | 2               |    | 12                   | 3  |                      |    |
| 31       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 32       | 3 plants.....                               | 1913  | 8                    | 57.5                              | .502                            | 28.63                              | 4                                              |                      |                 |    | 2                    | 2  |                      |    |
|          |                                             | 1914  | 8                    | 57.5                              | .489                            | 27.50                              | 4                                              |                      |                 |    | 2                    | 2  |                      |    |
| 33       | 6 plants.....                               | 1914  | 15                   | 56.0                              | .489                            | 26.85                              | 4                                              | 6                    |                 |    | 3                    | 2  |                      |    |
| 34       |                                             | 1915  | 15                   | 58.8                              | .440                            | 25.76                              | 4                                              | 4                    |                 |    | 3                    | 4  |                      |    |
| 35       | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 36       | 4 plants.....                               | 1913  | 6                    | 65.0                              | .428                            | 27.91                              |                                                |                      | 1               |    | 5                    |    |                      |    |
| 37       |                                             | 1914  | 5                    | 64.0                              | .360                            | 23.32                              |                                                |                      | 2               |    | 2                    | 1  |                      |    |
|          |                                             | 1915  | 7                    | 64.2                              | .272                            | 17.58                              |                                                |                      | 2               |    | 4                    | 1  |                      |    |
| 38       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 39       | 19 plants.....                              | 1913  | 48                   | 62.0                              | .449                            | 27.74                              | 4                                              | 11                   | 3               |    | 28                   | 2  |                      |    |
|          |                                             | 1914  | 47                   | 61.8                              | .390                            | 23.87                              | 4                                              | 11                   | 4               |    | 25                   | 3  |                      |    |
| 40       | 24 plants.....                              | 1914  | 60                   | 60.4                              | .411                            | 24.47                              | 4                                              | 19                   | 8               |    | 26                   | 3  |                      |    |
| 41       |                                             | 1915  | 62                   | 60.9                              | .397                            | 24.01                              | 7                                              | 14                   | 8               |    | 25                   | 8  |                      |    |



AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | Line No.       |
|-----------------------------------------------|--------------------|--------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-------------------|----------------|
| 6 and under 7 cts.                            | 7 and under 8 cts. | 8 and under 9 cts. | 9 and under 10 cts. | 10 and under 12 cts. | 12 and under 14 cts. | 14 and under 16 cts. | 16 and under 18 cts. | 18 and under 20 cts. | 20 and under 25 cts. | 25 and under 30 cts. | 30 and under 40 cts. | 40 and under 50 cts. | 50 and under 60 cts. | 60 and under 70 cts. | 70 cts. and over. |                |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 2<br>5               | 5<br>2               | 2<br>7               | 8<br>4               | 5<br>8               | 4<br>4               | 4                 | 1              |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 5<br>3               | 4<br>3               | 6<br>11              | 4<br>1               | 12<br>13             | 4<br>4               |                   | 3<br>4         |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |                |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 1                    | 1                    | 3<br>2               | 3<br>4               | 3<br>1               |                      |                   | 5<br>6         |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 1                    | 1                    | 1<br>4               | 5<br>6               | 2                    |                      |                   | 7<br>8         |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 1                    | 1                    | 13<br>15             | 3<br>3               |                      |                      |                   | 9<br>10        |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      | 16<br>9              | 3<br>6               | 4<br>5               |                      |                   | 11<br>12       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      | 4<br>3               | 4<br>2               |                   | 13<br>14       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 4                    | 3<br>1               | 3<br>8               | 13<br>4              | 2<br>10              |                   | 15<br>16       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      | 2<br>1               | 4<br>5<br>6          |                      |                   | 17<br>18<br>19 |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 1<br>1               | 1<br>1               | 16<br>17             | 8<br>9               | 11<br>9              | 4<br>2               |                   | 20<br>21       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 1                    | 5<br>3               | 20<br>14             | 12<br>20             | 24<br>15             | 2<br>10              |                   | 22<br>23       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |                |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 2<br>2               | 2<br>10              | 5<br>6               | 4<br>1               |                      | 1                 | 24<br>25       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 2<br>2               | 10<br>10             | 4<br>6               | 1<br>6               | 2<br>2               | 1                 | 26<br>27       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      | 6<br>8               | 10<br>9              | 5<br>1               |                      |                   | 28<br>29<br>30 |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 2                    | 4<br>2               |                      |                      |                      |                      |                   |                |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      | 4<br>6               | 4<br>6               | 2                    |                   | 31<br>32       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      | 2<br>3               | 7<br>8               | 4<br>3               | 2                    |                   | 33<br>34       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 1<br>1<br>1          | 1<br>3<br>1          | 2<br>1<br>1          | 2<br>1               |                      |                   | 35<br>36<br>37 |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 4                    | 1                    | 1                    | 1                    |                      |                      |                   |                |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 3<br>7               | 9<br>21              | 21<br>13             | 15<br>1              | 2<br>4               | 1                 | 38<br>39       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 2<br>4               | 7<br>6               | 23<br>22             | 18<br>24             | 5<br>4               | 4<br>2               | 1                 | 40<br>41       |

TABLE P.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Catchers, 13-inch, Eastern—                 | 1913  | 2                    | 72.0                              | \$0.376                         | \$27.07                            |                                                |                      |                 |    |                      | 2  |                      |    |
| 2        | 1 plant.....                                | 1914  | 2                    | 72.0                              | .433                            | 31.18                              |                                                |                      |                 |    |                      | 2  |                      |    |
| 3        | 3 plants.....                               | 1914  | 6                    | 63.5                              | .503                            | 31.79                              |                                                |                      | 2               |    | 2                    | 2  |                      |    |
| 4        | Pittsburgh—                                 | 1915  | 8                    | 62.1                              | .452                            | 27.95                              |                                                |                      | 4               |    | 2                    | 2  |                      |    |
| 5        | 1 plant.....                                | 1913  | 2                    | 66.0                              | .394                            | 25.97                              |                                                |                      |                 |    | 2                    |    |                      |    |
| 6        |                                             | 1914  | 2                    | 66.0                              | .352                            | 23.23                              |                                                |                      |                 |    | 2                    |    |                      |    |
| 7        | G. L. and M. W.—                            | 1915  | 2                    | 65.0                              | .391                            | 25.42                              |                                                |                      |                 |    | 2                    |    |                      |    |
| 8        | 3 plants.....                               | 1913  | 10                   | 53.2                              | .422                            | 21.78                              | 6                                              |                      |                 |    | 2                    |    |                      |    |
| 9        |                                             | 1914  | 10                   | 53.2                              | .426                            | 22.28                              | 6                                              |                      |                 | 2  | 2                    |    |                      |    |
| 10       |                                             | 1915  | 10                   | 52.0                              | .436                            | 22.75                              | 6                                              | 2                    |                 |    | 2                    |    |                      |    |
| 11       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 12       | 5 plants.....                               | 1913  | 14                   | 57.7                              | .411                            | 23.14                              | 6                                              |                      |                 | 2  | 4                    | 2  |                      |    |
|          |                                             | 1914  | 14                   | 57.7                              | .417                            | 23.69                              | 6                                              |                      |                 | 2  | 4                    | 2  |                      |    |
| 13       | 7 plants.....                               | 1914  | 18                   | 58.1                              | .444                            | 25.56                              | 6                                              |                      | 2               | 2  | 6                    | 2  |                      |    |
| 14       |                                             | 1915  | 20                   | 57.3                              | .438                            | 25.10                              | 6                                              | 2                    | 4               |    | 6                    | 2  |                      |    |
| 15       | Catchers, 16-inch: Eastern—                 | 1913  | 8                    | 58.4                              | .319                            | 18.87                              |                                                | 1                    | 5               |    | 2                    |    |                      |    |
| 16       | 4 plants.....                               | 1914  | 6                    | 58.7                              | .355                            | 21.33                              |                                                | 1                    | 3               |    | 2                    |    |                      |    |
| 17       | 4 plants.....                               | 1914  | 6                    | 59.7                              | .380                            | 23.26                              |                                                | 1                    | 2               |    | 3                    |    |                      |    |
| 18       |                                             | 1915  | 8                    | 59.2                              | .375                            | 22.51                              |                                                | 1                    | 4               |    | 3                    |    |                      |    |
| 19       | Pittsburgh—                                 | 1913  | 8                    | 66.3                              | .517                            | 34.26                              |                                                |                      |                 |    | 6                    | 2  |                      |    |
| 20       | 3 plants.....                               | 1914  | 7                    | 66.6                              | .392                            | 26.20                              |                                                |                      |                 |    | 5                    | 2  |                      |    |
| 21       | 5 plants.....                               | 1914  | 15                   | 65.1                              | .500                            | 32.56                              |                                                |                      | 1               |    | 12                   | 2  |                      |    |
| 22       |                                             | 1915  | 15                   | 65.1                              | .532                            | 34.62                              |                                                |                      | 1               |    | 12                   | 2  |                      |    |
| 23       | G. L. and M. W.—                            | 1913  | 10                   | 58.0                              | .465                            | 26.30                              | 3                                              | 2                    |                 |    | 5                    |    |                      |    |
| 24       | 3 plants.....                               | 1914  | 10                   | 58.0                              | .478                            | 26.86                              | 3                                              | 2                    |                 |    | 5                    |    |                      |    |
| 25       | 6 plants.....                               | 1914  | 17                   | 59.2                              | .483                            | 27.75                              | 3                                              | 4                    |                 |    | 10                   |    |                      |    |
| 26       |                                             | 1915  | 17                   | 59.9                              | .357                            | 21.21                              | 3                                              | 3                    |                 |    | 11                   |    |                      |    |
| 27       | Southern—                                   | 1913  | 10                   | 53.8                              | .353                            | 19.23                              | 4                                              | 2                    | 2               |    | 2                    |    |                      |    |
| 28       | 4 plants.....                               | 1914  | 8                    | 55.7                              | .417                            | 23.06                              | 2                                              | 2                    | 2               |    | 2                    |    |                      |    |
| 29       |                                             | 1915  | 8                    | 55.7                              | .404                            | 22.31                              | 2                                              | 2                    | 2               |    | 2                    |    |                      |    |
| 30       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 31       | 14 plants.....                              | 1913  | 36                   | 58.8                              | .413                            | 24.45                              | 7                                              | 5                    | 7               |    | 15                   | 2  |                      |    |
|          |                                             | 1914  | 31                   | 59.5                              | .419                            | 24.66                              | 5                                              | 5                    | 5               |    | 14                   | 2  |                      |    |
| 32       | 19 plants.....                              | 1914  | 46                   | 60.6                              | .464                            | 27.92                              | 5                                              | 7                    | 5               |    | 27                   | 2  |                      |    |
| 33       |                                             | 1915  | 48                   | 60.7                              | .422                            | 25.80                              | 5                                              | 6                    | 7               |    | 28                   | 2  |                      |    |
| 34       | Catchers, 18-inch: Eastern—                 | 1913  | 12                   | 55.1                              | .412                            | 22.84                              |                                                | 10                   |                 |    | 2                    |    |                      |    |
| 35       | 6 plants.....                               | 1914  | 11                   | 55.2                              | .385                            | 21.03                              |                                                | 9                    |                 |    | 2                    |    |                      |    |
| 36       |                                             | 1915  | 10                   | 55.3                              | .445                            | 24.31                              |                                                | 8                    |                 |    | 2                    |    |                      |    |
| 37       | Pittsburgh—                                 | 1913  | 9                    | 55.1                              | .502                            | 27.82                              |                                                | 5                    | 4               |    |                      |    |                      |    |
| 38       | 3 plants.....                               | 1914  | 9                    | 55.1                              | .438                            | 24.42                              |                                                | 5                    | 4               |    |                      |    |                      |    |
| 39       | 3 plants.....                               | 1914  | 12                   | 54.0                              | .416                            | 22.75                              |                                                | 8                    | 4               |    |                      |    |                      |    |
| 40       |                                             | 1915  | 12                   | 52.7                              | .377                            | 20.14                              | 6                                              | 2                    | 4               |    |                      |    |                      |    |
| 41       | G. L. and M. W.—                            | 1913  | 5                    | 50.7                              | .599                            | 29.78                              | 3                                              |                      |                 |    | 2                    |    |                      |    |
| 42       | 2 plants.....                               | 1914  | 5                    | 50.7                              | .565                            | 28.55                              | 3                                              |                      |                 |    | 2                    |    |                      |    |
| 43       | 3 plants.....                               | 1914  | 7                    | 52.4                              | .534                            | 27.79                              | 3                                              |                      | 2               |    | 2                    |    |                      |    |
| 44       |                                             | 1915  | 7                    | 52.8                              | .537                            | 28.60                              | 3                                              |                      | 2               |    | 2                    |    |                      |    |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 1           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                                  |                            | 2           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                            | 3           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 4                                |                                  | 2                                |                            | 4           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                |                                  |                                  |                            | 5           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                                  |                            | 6           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                                  |                            | 7           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 6                                |                                  |                                  |                            | 8           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 6                                |                                  |                                  |                            | 9           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 8                                |                                  |                                  |                            | 10          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 7                                | 7                                |                                  |                                  |                            | 11          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 8                                |                                  |                                  |                            | 12          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 10                               |                                  |                                  |                            | 13          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 12                               | 2                                |                                  |                            | 14          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 4                                | 1                                | 2                                |                                  |                                  |                            | 15          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                |                                  | 3                                | 2                                |                                  |                                  |                            | 16          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                |                                  | 2                                | 3                                |                                  |                                  |                            | 17          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                |                                  | 4                                | 2                                | 1                                |                                  |                            | 18          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 5                                |                                  |                            | 19          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 4                                |                                  |                                  |                            | 20          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 4                                | 4                                | 2                                | 1                          | 21          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 2                                | 2                                | 4                                | 1                          | 22          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 1                                | 5                                |                                  |                            | 23          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 5                                |                                  | 1                                |                            | 24          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 2                                | 7                                | 1                                | 1                          | 25          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 8                                | 5                                |                                  |                                  |                            | 26          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 6                                | 2                                |                                  |                                  |                            | 27          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 2                                | 1                                | 1                                |                            | 28          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 3                                | 1                                | 1                                | 1                                |                            | 29          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 6                                | 11                               | 8                                | 10                               |                                  |                            | 30          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 2                                | 12                               | 8                                | 6                                | 2                                |                            | 31          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 2                                | 14                               | 11                               | 12                               | 4                                | 2                          | 32          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 6                                | 21                               | 10                               | 4                                | 5                                | 1                          | 33          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 4                                | 2                                |                                  |                            | 34          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 7                                | 2                                | 1                                |                            | 35          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 5                                |                                  |                                  | 1                          | 36          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 3                                | 2                                |                            | 37          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 1                                | 4                                |                                  |                            | 38          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 7                                | 1                                | 4                                |                                  |                            | 39          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 5                                | 4                                |                                  |                                  |                            | 40          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 3                                |                            | 41          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 5                                |                                  |                            | 42          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 5                                |                                  |                            | 43          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 3                                | 2                                |                            | 44          |

TABLE P.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—

| Line No. | Occupation, district, and number of plants.        | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |       |                      |       |                      |       |
|----------|----------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-------|----------------------|-------|----------------------|-------|
|          |                                                    |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60    | Over 60 and under 72 | 72    | Over 72 and under 84 | 84    |
| 1        | Catchers, 18-inch—<br>Southern—<br>2 plants.....   | 1913  | 2                    | 55.0                              | \$0.396                         | \$22.01                            | .....                                          | 1                    | 1               | ..... | .....                | ..... | .....                | ..... |
| 2        |                                                    | 1914  | 2                    | 55.0                              | .387                            | 21.43                              | .....                                          | 1                    | 1               | ..... | .....                | ..... | .....                | ..... |
| 3        |                                                    | 1915  | 2                    | 55.0                              | .358                            | 19.78                              | .....                                          | 1                    | 1               | ..... | .....                | ..... | .....                | ..... |
| 4        | Total—<br>13 plants.....                           | 1913  | 28                   | 54.3                              | .473                            | 25.62                              | 3                                              | 16                   | 5               | ..... | 4                    | ..... | .....                | ..... |
| 5        |                                                    | 1914  | 27                   | 54.3                              | .436                            | 23.58                              | 3                                              | 15                   | 5               | ..... | 4                    | ..... | .....                | ..... |
| 6        | 14 plants.....                                     | 1914  | 32                   | 54.1                              | .429                            | 23.18                              | 3                                              | 18                   | 7               | ..... | 4                    | ..... | .....                | ..... |
| 7        |                                                    | 1915  | 31                   | 53.7                              | .434                            | 23.37                              | 9                                              | 11                   | 7               | ..... | 4                    | ..... | .....                | ..... |
| 8        | Catchers, all sizes:<br>Eastern—<br>12 plants..... | 1913  | 54                   | 56.5                              | .389                            | 22.11                              | .....                                          | 25                   | 27              | ..... | .....                | 2     | .....                | ..... |
| 9        |                                                    | 1914  | 52                   | 56.7                              | .372                            | 21.09                              | .....                                          | 24                   | 26              | ..... | .....                | 2     | .....                | ..... |
| 10       | 15 plants.....                                     | 1914  | 68                   | 57.2                              | .398                            | 22.79                              | .....                                          | 30                   | 32              | ..... | 6                    | ..... | .....                | ..... |
| 11       |                                                    | 1915  | 71                   | 57.2                              | .400                            | 22.86                              | .....                                          | 29                   | 34              | ..... | 8                    | ..... | .....                | ..... |
| 12       | Pittsburgh—<br>11 plants.....                      | 1913  | 82                   | 61.8                              | .438                            | 27.01                              | .....                                          | 9                    | 14              | ..... | 59                   | ..... | .....                | ..... |
| 13       |                                                    | 1914  | 80                   | 62.4                              | .377                            | 23.42                              | .....                                          | 9                    | .....           | ..... | 71                   | ..... | .....                | ..... |
| 14       | 14 plants.....                                     | 1914  | 100                  | 62.2                              | .400                            | 24.89                              | .....                                          | 12                   | .....           | ..... | 88                   | ..... | .....                | ..... |
| 15       |                                                    | 1915  | 100                  | 61.5                              | .426                            | 26.27                              | .....                                          | 12                   | 12              | ..... | 76                   | ..... | .....                | ..... |
| 16       | G. L. and M. W.—<br>12 plants.....                 | 1913  | 54                   | 56.0                              | .522                            | 28.80                              | .....                                          | 27                   | 18              | ..... | 9                    | ..... | .....                | ..... |
| 17       |                                                    | 1914  | 52                   | 55.0                              | .502                            | 27.29                              | 4                                              | 21                   | 18              | ..... | 9                    | ..... | .....                | ..... |
| 18       | 19 plants.....                                     | 1914  | 96                   | 57.0                              | .484                            | 27.24                              | .....                                          | 27                   | 57              | ..... | 12                   | ..... | .....                | ..... |
| 19       |                                                    | 1915  | 91                   | 58.3                              | .471                            | 27.46                              | .....                                          | 17                   | 55              | ..... | 22                   | ..... | .....                | ..... |
| 20       | Southern—<br>9 plants.....                         | 1913  | 32                   | 54.7                              | .429                            | 23.34                              | 6                                              | 15                   | 5               | ..... | 6                    | ..... | .....                | ..... |
| 21       |                                                    | 1914  | 29                   | 51.8                              | .433                            | 23.41                              | 6                                              | 13                   | 5               | ..... | 5                    | ..... | .....                | ..... |
| 22       |                                                    | 1915  | 31                   | 55.4                              | .402                            | 21.73                              | 6                                              | 13                   | 5               | ..... | 7                    | ..... | .....                | ..... |
| 23       | Total—<br>44 plants.....                           | 1913  | 222                  | 58.1                              | .445                            | 25.73                              | 6                                              | 76                   | 64              | ..... | 74                   | ..... | .....                | ..... |
| 24       |                                                    | 1914  | 213                  | 58.2                              | .414                            | 23.80                              | 10                                             | 67                   | 49              | ..... | 85                   | ..... | 2                    | ..... |
| 25       | 57 plants.....                                     | 1914  | 293                  | 58.6                              | .430                            | 25.03                              | 6                                              | 82                   | 94              | ..... | 111                  | ..... | .....                | ..... |
| 26       |                                                    | 1915  | 296                  | 58.8                              | .432                            | 25.35                              | 6                                              | 71                   | 106             | ..... | 113                  | ..... | .....                | ..... |
| 27       | Stranders, 8-inch:<br>Eastern—<br>4 plants.....    | 1913  | 19                   | 54.4                              | 0.288                           | 15.66                              | .....                                          | 12                   | 6               | 1     | .....                | ..... | .....                | ..... |
| 28       |                                                    | 1914  | 19                   | 54.4                              | .277                            | 15.06                              | .....                                          | 12                   | 6               | 1     | .....                | ..... | .....                | ..... |
| 29       | 6 plants.....                                      | 1914  | 31                   | 56.4                              | .262                            | 14.75                              | .....                                          | 20                   | 3               | ..... | 8                    | ..... | .....                | ..... |
| 30       |                                                    | 1915  | 31                   | 56.4                              | .279                            | 15.80                              | .....                                          | 20                   | 3               | ..... | 8                    | ..... | .....                | ..... |
| 31       | Pittsburgh—<br>6 plants.....                       | 1913  | 68                   | 58.8                              | .290                            | 17.11                              | .....                                          | 24                   | 22              | ..... | 22                   | ..... | .....                | ..... |
| 32       |                                                    | 1914  | 68                   | 59.9                              | .260                            | 15.47                              | .....                                          | 24                   | 12              | ..... | 32                   | ..... | .....                | ..... |
| 33       | 7 plants.....                                      | 1914  | 70                   | 60.0                              | .258                            | 15.42                              | .....                                          | 24                   | 12              | ..... | 34                   | ..... | .....                | ..... |
| 34       |                                                    | 1915  | 70                   | 59.0                              | .297                            | 17.43                              | 24                                             | .....                | 12              | ..... | 26                   | 8     | .....                | ..... |
| 35       | G. L. and M. W.—<br>3 plants.....                  | 1913  | 18                   | 59.2                              | .366                            | 21.72                              | .....                                          | 12                   | .....           | ..... | 6                    | ..... | .....                | ..... |
| 36       |                                                    | 1914  | 17                   | 59.4                              | .300                            | 17.77                              | .....                                          | 11                   | .....           | ..... | 6                    | ..... | .....                | ..... |
| 37       | 5 plants.....                                      | 1914  | 31                   | 59.2                              | .272                            | 16.07                              | .....                                          | 17                   | .....           | ..... | 14                   | ..... | .....                | ..... |
| 38       |                                                    | 1915  | 28                   | 62.6                              | .288                            | 18.03                              | .....                                          | 6                    | .....           | ..... | 22                   | ..... | .....                | ..... |
| 39       | Southern—<br>3 plants.....                         | 1913  | 12                   | 57.4                              | .265                            | 15.22                              | 4                                              | .....                | 2               | ..... | 6                    | ..... | .....                | ..... |
| 40       |                                                    | 1914  | 12                   | 57.4                              | .235                            | 13.38                              | 4                                              | .....                | 2               | ..... | 6                    | ..... | .....                | ..... |
| 41       |                                                    | 1915  | 12                   | 57.4                              | .196                            | 10.91                              | 4                                              | .....                | 2               | ..... | 6                    | ..... | .....                | ..... |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
*BAR MILLS*—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                |                                  |                            | 1           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                |                                  |                            | 2           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                            | 3           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 6                                | 7                                | 7                                | 5                                |                            | 4           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 12                               | 2                                | 11                               | 1                                |                            | 5           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 15                               | 4                                | 11                               | 1                                |                            | 6           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 5                                | 12                               | 6                                | 3                                | 4                                | 1                          | 7           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 4                                | 13                               | 12                               | 16                               | 9                                |                                  |                            | 8           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 4                                | 9                                | 25                               | 8                                | 4                                | 1                                | 1                          | 9           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 4                                | 9                                | 26                               | 18                               | 5                                | 5                                | 1                          | 10          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 4                                | 6                                | 32                               | 21                               | 3                                | 4                                | 1                          | 11          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 4                                | 25                               | 28                               | 21                               | 2                                |                            | 12          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 5                                | 5                                | 44                               | 18                               | 8                                |                                  |                            | 13          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 7                                | 49                               | 20                               | 16                               | 2                                | 1                          | 14          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 5                                | 11                               | 43                               | 27                               | 10                               | 8                                | 1                          | 15          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 10                               | 14                               | 15                               |                                  |                            | 16          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 9                                | 17                               | 17                               | 9                                | 4                          | 17          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 19                               | 25                               | 37                               | 10                               | 1                          | 18          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 5                                | 17                               | 37                               | 21                               | 14                               |                            | 19          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 8                                | 10                               | 10                               |                                  |                            | 20          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 3                                | 8                                | 5                                | 11                               | 1                                |                            | 21          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 4                                | 3                                | 10                               | 3                                | 10                               | 1                                |                            | 22          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 21                               | 55                               | 68                               | 55                               | 13                         | 4           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 10                               | 17                               | 86                               | 48                               | 40                               | 11                               | 1                          | 23          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 10                               | 23                               | 102                              | 68                               | 69                               | 18                               | 3                          | 24          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 8                                | 25                               | 102                              | 88                               | 44                               | 27                               | 2                          | 25          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 26          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 1                                | 4                                | 5                                | 1                                | 6                                |                                  | 2                                |                            | 27          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 1                                | 6                                | 1                                | 4                                | 5                                | 2                                |                                  |                            | 28          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 1                                | 10                               | 4                                | 6                                | 8                                | 2                                |                                  |                            | 29          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                | 12                               | 7                                | 8                                | 2                                | 2                                |                                  |                            | 30          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  | 2                                | 7                                |                                  | 1                                | 3                                | 10                               | 12                               | 22                               | 11                               |                                  |                            | 31          |
|                                               |                                |                                |                                 | 3                                | 3                                | 2                                |                                  | 1                                |                                  | 22                               | 13                               | 23                               | 1                                |                                  |                            | 32          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 | 3                                | 3                                | 2                                |                                  | 1                                |                                  | 24                               | 13                               | 23                               | 1                                |                                  |                            | 33          |
|                                               |                                |                                |                                 | 1                                | 4                                | 2                                |                                  | 1                                |                                  | 6                                | 13                               | 37                               | 6                                |                                  |                            | 34          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  | 13                               | 3                                |                                  |                            | 35          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 14                               |                                  | 3                                |                                  |                            | 36          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                |                                  | 8                                | 16                               | 2                                | 3                                |                                  |                            | 37          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 1                                |                                  | 2                                | 16                               | 9                                |                                  |                                  |                            | 38          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 3                                | 6                                | 2                                |                                  |                                  |                            | 39          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                |                                  | 1                                | 3                                |                                  |                                  |                                  |                            | 40          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 6                                |                                  |                                  |                                  |                            | 41          |
|                                               |                                |                                |                                 |                                  | 2                                | 2                                |                                  | 3                                |                                  | 3                                | 2                                |                                  |                                  |                                  |                            |             |

TABLE P.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, 1913 TO 1915—

| Line No.               | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|------------------------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|                        |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| Stranders, 8-inch—Con. |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 1                      | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 2                      | 16 plants.....                              | 1913  | 117                  | 58.0                              | \$0.299                         | \$17.39                            | 4                                              | 48                   | 30              | 1  | 34                   |    |                      |    |
| 3                      |                                             | 1914  | 116                  | 58.6                              | .266                            | 15.52                              | 4                                              | 47                   | 20              | 1  | 44                   |    |                      |    |
| 4                      | 21 plants.....                              | 1914  | 144                  | 58.9                              | .200                            | 15.24                              | 4                                              | 61                   | 17              |    | 62                   |    |                      |    |
| 5                      |                                             | 1915  | 141                  | 59.0                              | .282                            | 16.63                              | 28                                             | 26                   | 17              |    | 62                   | 8  |                      |    |
| Stranders, 9-inch:     |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| Eastern—               |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 6                      | 3 plants.....                               | 1913  | 14                   | 58.1                              | .255                            | 15.06                              |                                                | 8                    |                 |    | 6                    |    |                      |    |
| 7                      |                                             | 1914  | 14                   | 58.1                              | .206                            | 11.95                              |                                                | 8                    |                 |    | 6                    |    |                      |    |
| 8                      |                                             | 1915  | 16                   | 57.7                              | .194                            | 11.18                              |                                                | 10                   |                 |    | 6                    |    |                      |    |
| Pittsburgh—            |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 9                      | 5 plants.....                               | 1913  | 24                   | 61.0                              | .252                            | 15.01                              |                                                | 6                    | 6               |    | 12                   |    |                      |    |
| 10                     |                                             | 1914  | 27                   | 59.9                              | .251                            | 14.59                              |                                                | 9                    | 6               |    | 12                   |    |                      |    |
| 11                     | 6 plants.....                               | 1914  | 31                   | 59.7                              | .246                            | 14.31                              |                                                | 9                    | 10              |    | 12                   |    |                      |    |
| 12                     |                                             | 1915  | 31                   | 58.5                              | .254                            | 14.64                              | 9                                              |                      | 10              |    | 12                   |    |                      |    |
| G. L. and M. W.—       |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 13                     | 3 plants.....                               | 1913  | 28                   | 52.8                              | .367                            | 19.20                              | 18                                             |                      |                 |    | 8                    | 2  |                      |    |
| 14                     |                                             | 1914  | 28                   | 52.8                              | .351                            | 18.63                              | 18                                             |                      |                 |    | 8                    | 2  |                      |    |
| 15                     | 3 plants.....                               | 1914  | 34                   | 51.3                              | .356                            | 19.35                              | 18                                             |                      |                 |    | 16                   |    |                      |    |
| 16                     |                                             | 1915  | 34                   | 51.3                              | .339                            | 18.61                              | 18                                             |                      |                 |    | 16                   |    |                      |    |
| Southern—              |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 17                     | 4 plants.....                               | 1913  | 16                   | 55.9                              | .227                            | 12.68                              |                                                | 7                    | 9               |    |                      |    |                      |    |
| 18                     |                                             | 1914  | 17                   | 55.7                              | .223                            | 12.41                              |                                                | 8                    | 9               |    |                      |    |                      |    |
| 19                     |                                             | 1915  | 17                   | 55.7                              | .231                            | 12.86                              |                                                | 8                    | 9               |    |                      |    |                      |    |
| Total—                 |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 20                     | 15 plants.....                              | 1913  | 82                   | 56.7                              | .287                            | 16.00                              | 18                                             | 21                   | 15              |    | 26                   | 2  |                      |    |
| 21                     |                                             | 1914  | 86                   | 56.5                              | .271                            | 15.04                              | 18                                             | 25                   | 15              |    | 26                   | 2  |                      |    |
| 22                     | 16 plants.....                              | 1914  | 96                   | 56.8                              | .275                            | 15.41                              | 18                                             | 25                   | 19              |    | 34                   |    |                      |    |
| 23                     |                                             | 1915  | 98                   | 56.4                              | .270                            | 15.15                              | 27                                             | 18                   | 19              |    | 34                   |    |                      |    |
| Stranders, 10-inch:    |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| Eastern—               |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 24                     | 3 plants.....                               | 1913  | 18                   | 53.7                              | .284                            | 15.40                              |                                                | 8                    | 10              |    |                      |    |                      |    |
| 25                     |                                             | 1914  | 18                   | 53.7                              | .265                            | 14.34                              |                                                | 8                    | 10              |    |                      |    |                      |    |
| 26                     | 3 plants.....                               | 1914  | 22                   | 56.9                              | .294                            | 17.15                              |                                                | 8                    | 6               |    | 8                    |    |                      |    |
| 27                     |                                             | 1915  | 22                   | 56.8                              | .294                            | 17.12                              |                                                | 8                    | 6               |    | 8                    |    |                      |    |
| Pittsburgh—            |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 28                     | 5 plants.....                               | 1913  | 58                   | 62.6                              | .434                            | 26.78                              | 12                                             |                      | 8               |    | 38                   |    |                      |    |
| 29                     |                                             | 1914  | 58                   | 62.6                              | .394                            | 24.00                              | 12                                             |                      | 8               |    | 38                   |    |                      |    |
| 30                     | 8 plants.....                               | 1914  | 79                   | 60.2                              | .381                            | 22.59                              | 12                                             | 17                   | 8               |    | 42                   |    |                      |    |
| 31                     |                                             | 1915  | 79                   | 59.3                              | .373                            | 21.44                              | 27                                             | 2                    | 8               |    | 31                   | 11 |                      |    |
| G. L. and M. W.—       |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 32                     | 3 plants.....                               | 1913  | 20                   | 53.3                              | .408                            | 21.54                              | 8                                              |                      | 12              |    |                      |    |                      |    |
| 33                     |                                             | 1914  | 17                   | 48.9                              | .371                            | 17.93                              | 8                                              |                      | 9               |    |                      |    |                      |    |
| 34                     | 8 plants.....                               | 1914  | 57                   | 56.4                              | .317                            | 17.93                              | 8                                              | 20                   | 17              |    | 12                   |    |                      |    |
| 35                     |                                             | 1915  | 57                   | 56.5                              | .335                            | 19.42                              | 8                                              | 20                   | 17              |    | 12                   |    |                      |    |
| Southern—              |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 36                     | 3 plants.....                               | 1913  | 14                   | 48.6                              | .289                            | 14.08                              | 8                                              | 4                    | 2               |    |                      |    |                      |    |
| 37                     |                                             | 1914  | 14                   | 48.6                              | .282                            | 13.75                              | 8                                              | 4                    | 2               |    |                      |    |                      |    |
| 38                     |                                             | 1915  | 14                   | 48.6                              | .283                            | 13.81                              | 8                                              | 4                    | 2               |    |                      |    |                      |    |
| Total—                 |                                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 39                     | 14 plants.....                              | 1913  | 110                  | 57.6                              | .386                            | 22.35                              | 28                                             | 12                   | 32              |    | 38                   |    |                      |    |
| 40                     |                                             | 1914  | 107                  | 57.1                              | .354                            | 20.07                              | 28                                             | 12                   | 29              |    | 38                   |    |                      |    |
| 41                     | 22 plants.....                              | 1914  | 172                  | 57.6                              | .341                            | 19.63                              | 28                                             | 49                   | 33              |    | 62                   |    |                      |    |
| 42                     |                                             | 1915  | 172                  | 57.2                              | .343                            | 19.60                              | 43                                             | 34                   | 33              |    | 51                   | 11 |                      |    |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | Line No. |
|-----------------------------------------------|--------------------|--------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-------------------|----------|
| 6 and under 7 cts.                            | 7 and under 8 cts. | 8 and under 9 cts. | 9 and under 10 cts. | 10 and under 12 cts. | 12 and under 14 cts. | 14 and under 16 cts. | 16 and under 18 cts. | 18 and under 20 cts. | 20 and under 25 cts. | 25 and under 30 cts. | 30 and under 40 cts. | 40 and under 50 cts. | 50 and under 60 cts. | 60 and under 70 cts. | 70 cts. and over. |          |
|                                               |                    |                    |                     | 2                    | 7                    |                      | 2                    | 8                    | 20                   | 19                   | 43                   | 14                   | 2                    |                      |                   | 1        |
|                                               |                    |                    |                     | 3                    | 3                    | 2                    | 4                    | 7                    | 26                   | 37                   | 28                   | 6                    |                      |                      |                   | 2        |
|                                               |                    |                    |                     | 3                    | 3                    | 2                    | 6                    | 11                   | 39                   | 41                   | 33                   | 6                    |                      |                      |                   | 3        |
|                                               |                    |                    |                     | 1                    | 6                    | 4                    | 2                    | 5                    | 23                   | 38                   | 54                   | 8                    |                      |                      |                   | 4        |
|                                               |                    |                    |                     |                      |                      |                      |                      | 6                    | 2                    | 2                    | 2                    | 2                    |                      |                      |                   | 5        |
|                                               |                    |                    |                     |                      |                      |                      | 2                    | 8                    | 4                    | 4                    |                      |                      |                      |                      |                   | 6        |
|                                               |                    |                    |                     | 1                    |                      | 2                    |                      | 8                    | 2                    | 3                    |                      |                      |                      |                      |                   | 7        |
|                                               |                    |                    |                     |                      |                      |                      | 4                    |                      | 10                   | 7                    | 2                    | 1                    |                      |                      |                   | 8        |
|                                               |                    |                    |                     |                      | 3                    | 3                    |                      |                      | 8                    | 6                    | 5                    | 2                    |                      |                      |                   | 9        |
|                                               |                    |                    |                     |                      | 3                    | 3                    |                      |                      | 12                   | 6                    | 5                    | 2                    |                      |                      |                   | 10       |
|                                               |                    |                    |                     |                      | 2                    | 2                    | 2                    | 1                    | 10                   | 8                    | 8                    |                      |                      |                      |                   | 11       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 2                    |                      | 20                   | 6                    |                      |                      |                   | 12       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 2                    | 26                   |                      |                      |                      |                   | 13       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      | 34                   |                      |                      |                      |                   | 14       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      | 34                   |                      |                      |                      |                   | 15       |
|                                               |                    |                    |                     |                      |                      |                      | 2                    | 1                    | 9                    | 4                    |                      |                      |                      |                      |                   | 16       |
|                                               |                    |                    |                     |                      |                      | 2                    |                      | 4                    | 6                    | 4                    | 1                    |                      |                      |                      |                   | 17       |
|                                               |                    |                    |                     |                      |                      |                      |                      | 4                    | 6                    | 6                    | 1                    |                      |                      |                      |                   | 18       |
|                                               |                    |                    |                     |                      |                      |                      | 6                    | 7                    | 23                   | 13                   | 24                   | 9                    |                      |                      |                   | 19       |
|                                               |                    |                    |                     |                      | 3                    | 7                    |                      | 12                   | 14                   | 16                   | 32                   | 2                    |                      |                      |                   | 20       |
|                                               |                    |                    |                     |                      | 3                    | 7                    |                      | 12                   | 18                   | 14                   | 40                   | 2                    |                      |                      |                   | 21       |
|                                               |                    |                    |                     | 1                    | 4                    | 2                    | 13                   | 18                   | 18                   | 17                   | 43                   |                      |                      |                      |                   | 22       |
|                                               |                    |                    |                     |                      |                      |                      |                      | 2                    | 2                    | 9                    | 3                    | 2                    |                      |                      |                   | 23       |
|                                               |                    |                    |                     |                      |                      |                      |                      | 4                    | 6                    | 4                    | 2                    | 2                    |                      |                      |                   | 24       |
|                                               |                    |                    |                     |                      |                      |                      |                      | 4                    | 6                    | 2                    | 8                    | 2                    |                      |                      |                   | 25       |
|                                               |                    |                    |                     |                      |                      |                      | 2                    | 2                    |                      | 9                    | 7                    | 2                    |                      |                      |                   | 26       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 8                    | 22                   | 5                    | 22                   | 1                    |                   | 27       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 12                   | 23                   | 10                   | 13                   |                      |                   | 28       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 1                    | 17                   | 35                   | 13                   | 13                   |                      |                   | 29       |
|                                               |                    |                    |                     |                      |                      |                      |                      | 3                    | 15                   | 41                   | 8                    |                      |                      | 12                   |                   | 30       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      | 12                   | 4                    |                      | 4                    |                   | 31       |
|                                               |                    |                    |                     |                      |                      |                      |                      | 2                    | 2                    | 9                    | 2                    | 2                    |                      |                      |                   | 32       |
|                                               |                    |                    |                     |                      | 6                    |                      | 6                    | 6                    | 4                    | 6                    | 21                   | 12                   | 2                    |                      |                   | 33       |
|                                               |                    |                    |                     |                      |                      | 6                    | 6                    | 6                    | 6                    | 17                   | 10                   | 10                   |                      |                      |                   | 34       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 8                    | 6                    |                      |                      |                      |                   | 35       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 8                    | 6                    |                      |                      |                      |                   | 36       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 8                    | 6                    |                      |                      |                      |                   | 37       |
|                                               |                    |                    |                     |                      |                      |                      |                      | 2                    | 2                    | 25                   | 43                   | 11                   | 22                   | 5                    |                   | 38       |
|                                               |                    |                    |                     |                      |                      |                      |                      | 4                    | 8                    | 26                   | 40                   | 14                   | 15                   |                      |                   | 39       |
|                                               |                    |                    |                     |                      | 6                    |                      | 10                   | 11                   | 33                   | 70                   | 27                   | 15                   |                      |                      |                   | 40       |
|                                               |                    |                    |                     |                      |                      | 8                    | 8                    | 9                    | 34                   | 71                   | 20                   | 10                   | 12                   |                      |                   | 41       |

TABLE P.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, 1913 TO 1915—

| Line No. | Occupation, district, and number of plants.                        | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|--------------------------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                                                    |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Stranders, 12-inch: Eastern—<br>8 plants.....                      | 1913  | 39                   | 56.0                              | \$0.296                         | \$16.61                            |                                                | 29                   |                 |    | 10                   |    |                      |    |
|          |                                                                    | 1914  | 42                   | 55.9                              | .289                            | 16.14                              |                                                | 32                   |                 |    | 10                   |    |                      |    |
| 3        | 10 plants.....                                                     | 1914  | 50                   | 55.9                              | .295                            | 16.45                              |                                                | 36                   | 4               |    | 10                   |    |                      |    |
| 4        |                                                                    | 1915  | 43                   | 55.9                              | .297                            | 16.56                              |                                                | 31                   | 2               |    | 10                   |    |                      |    |
| 5        | Pittsburgh—<br>5 plants.....                                       | 1913  | 36                   | 62.3                              | .341                            | 20.95                              |                                                | 6                    | 6               |    | 24                   |    |                      |    |
|          |                                                                    | 1914  | 32                   | 62.1                              | .276                            | 17.16                              |                                                | 6                    | 6               |    | 20                   |    |                      |    |
| 7        | 6 plants.....                                                      | 1914  | 34                   | 62.2                              | .280                            | 17.45                              |                                                | 6                    | 6               |    | 22                   |    |                      |    |
| 8        |                                                                    | 1915  | 34                   | 61.2                              | .332                            | 20.12                              | 6                                              |                      | 6               |    | 22                   |    |                      |    |
| 9        | G. L. and M. W.—<br>2 plants.....                                  | 1913  | 13                   | 70.6                              | .480                            | 34.16                              |                                                |                      |                 |    | 3                    | 10 |                      |    |
|          |                                                                    | 1914  | 15                   | 70.0                              | .412                            | 29.12                              |                                                |                      |                 |    | 5                    | 10 |                      |    |
| 11       | 5 plants.....                                                      | 1914  | 30                   | 61.5                              | .367                            | 23.07                              |                                                | 14                   |                 |    | 6                    | 10 |                      |    |
| 12       |                                                                    | 1915  | 18                   | 62.2                              | .415                            | 26.01                              |                                                | 8                    |                 |    | 4                    | 6  |                      |    |
| 13       | Southern—<br>1 plant.....                                          | 1913  | 4                    | 66.0                              | .570                            | 37.59                              |                                                |                      |                 |    | 4                    |    |                      |    |
|          |                                                                    | 1914  | 2                    | 72.0                              | .462                            | 33.26                              |                                                |                      |                 |    |                      | 2  |                      |    |
| 15       |                                                                    | 1915  | 2                    | 72.0                              | .428                            | 30.78                              |                                                |                      |                 |    |                      | 2  |                      |    |
| 16       | Total—<br>16 plants.....                                           | 1913  | 92                   | 61.0                              | .351                            | 21.70                              |                                                | 35                   | 6               |    | 41                   | 10 |                      |    |
|          |                                                                    | 1914  | 91                   | 60.8                              | .308                            | 19.01                              |                                                | 38                   | 6               |    | 35                   | 12 |                      |    |
| 18       | 22 plants.....                                                     | 1914  | 116                  | 59.5                              | .312                            | 18.75                              |                                                | 56                   | 10              |    | 38                   | 12 |                      |    |
| 19       |                                                                    | 1915  | 97                   | 59.3                              | .334                            | 19.85                              | 6                                              | 39                   | 8               |    | 36                   | 8  |                      |    |
| 20       | Stranders, 13-inch, 14-inch, and 15-inch: Eastern—<br>1 plant..... | 1913  | 4                    | 72.0                              | .285                            | 20.52                              |                                                |                      |                 |    |                      | 4  |                      |    |
|          |                                                                    | 1914  | 4                    | 72.0                              | .419                            | 30.17                              |                                                |                      |                 |    |                      | 4  |                      |    |
| 22       | 3 plants.....                                                      | 1914  | 13                   | 63.6                              | .394                            | 25.23                              |                                                |                      | 3               |    | 6                    | 4  |                      |    |
| 23       |                                                                    | 1915  | 16                   | 62.5                              | .328                            | 20.50                              |                                                |                      | 6               |    | 6                    | 4  |                      |    |
| 24       | Pittsburgh—<br>2 plants.....                                       | 1913  | 11                   | 53.5                              | .506                            | 26.92                              |                                                | 9                    |                 |    | 2                    |    |                      |    |
|          |                                                                    | 1914  | 11                   | 53.5                              | .390                            | 20.90                              |                                                | 9                    |                 |    | 2                    |    |                      |    |
| 26       | G. L. and M. W.—<br>2 plants.....                                  | 1915  | 11                   | 51.1                              | .402                            | 20.69                              | 9                                              |                      |                 |    | 2                    |    |                      |    |
| 27       |                                                                    | 1913  | 24                   | 63.7                              | .286                            | 18.29                              |                                                |                      |                 | 13 | 11                   |    |                      |    |
| 28       |                                                                    | 1914  | 24                   | 63.7                              | .321                            | 20.59                              |                                                |                      |                 | 13 | 11                   |    |                      |    |
| 29       |                                                                    | 1915  | 25                   | 60.7                              | .371                            | 22.89                              |                                                | 13                   |                 |    | 12                   |    |                      |    |
| 30       | Total—<br>5 plants.....                                            | 1913  | 39                   | 61.6                              | .348                            | 20.96                              |                                                | 9                    |                 | 13 | 13                   | 4  |                      |    |
|          |                                                                    | 1914  | 39                   | 61.6                              | .350                            | 21.66                              |                                                | 9                    |                 | 13 | 13                   | 4  |                      |    |
| 32       | 7 plants.....                                                      | 1914  | 48                   | 61.3                              | .357                            | 21.92                              |                                                | 9                    | 3               | 13 | 19                   | 4  |                      |    |
| 33       |                                                                    | 1915  | 52                   | 59.2                              | .365                            | 21.69                              | 9                                              | 13                   | 6               |    | 20                   | 4  |                      |    |
| 34       | Stranders, 16-inch: Eastern—<br>3 plants.....                      | 1913  | 5                    | 60.4                              | .377                            | 23.07                              |                                                |                      | 3               |    | 2                    |    |                      |    |
|          |                                                                    | 1914  | 4                    | 61.1                              | .446                            | 27.77                              |                                                |                      | 2               |    | 2                    |    |                      |    |
| 36       | 3 plants.....                                                      | 1914  | 4                    | 62.7                              | .472                            | 29.91                              |                                                |                      | 1               |    | 3                    |    |                      |    |
| 37       |                                                                    | 1915  | 5                    | 61.6                              | .424                            | 26.34                              |                                                |                      | 2               |    | 3                    |    |                      |    |
| 38       | Pittsburgh—<br>2 plants.....                                       | 1913  | 6                    | 64.3                              | .500                            | 32.18                              |                                                |                      |                 |    | 6                    |    |                      |    |
|          |                                                                    | 1914  | 5                    | 64.4                              | .330                            | 21.24                              |                                                |                      |                 |    | 5                    |    |                      |    |
| 40       | 4 plants.....                                                      | 1914  | 9                    | 63.8                              | .483                            | 30.90                              |                                                |                      | 1               |    | 8                    |    |                      |    |
| 41       |                                                                    | 1915  | 9                    | 63.8                              | .523                            | 33.45                              |                                                |                      | 1               |    | 8                    |    |                      |    |
| 42       | G. L. and M. W.—<br>2 plants.....                                  | 1913  | 17                   | 48.5                              | .431                            | 21.42                              | 9                                              | 8                    |                 |    |                      |    |                      |    |
|          |                                                                    | 1914  | 17                   | 48.5                              | .444                            | 21.99                              | 9                                              | 8                    |                 |    |                      |    |                      |    |
| 44       | 4 plants.....                                                      | 1914  | 25                   | 53.8                              | .425                            | 22.90                              | 9                                              | 8                    |                 |    | 8                    |    |                      |    |
| 45       |                                                                    | 1915  | 22                   | 55.3                              | .389                            | 21.64                              | 6                                              | 8                    |                 |    | 8                    |    |                      |    |



AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | Line<br>No.                |    |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|----|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |    |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 11                               | 12                               | 10                               | 6                                |                                  |                                  |                            | 1  |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 17                               | 8                                | 14                               | 3                                |                                  |                                  |                            | 2  |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 17                               | 12                               | 17                               | 4                                |                                  |                                  |                            | 3  |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 14                               | 9                                | 15                               | 5                                |                                  |                                  |                            | 4  |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 15                               | 5                                | 4                                | 4                                |                                  |                                  |                            | 5  |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 19                               | 6                                | 3                                | 3                                |                                  | 8                                |                            | 6  |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 19                               | 6                                | 5                                | 3                                |                                  | 1                                |                            | 7  |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 10                               | 7                                | 6                                | 9                                |                                  | 2                                |                            | 8  |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                |                                  | 10                               |                                  |                            | 9  |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 5                                |                                  | 10                               |                                  |                                  |                            | 10 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 14                               | 3                                | 11                               | 1                                |                                  |                            | 11 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 3                                | 1                                | 2                                | 7                                | 4                                | 1                                |                            | 12 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                            | 13 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  | 1                                |                                  | 2                          | 14 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                |                                  |                                  |                            | 15 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 26                               | 17                               | 17                               | 12                               | 18                               |                                  |                            | 2  |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 36                               | 19                               | 18                               | 16                               | 2                                |                                  |                            | 16 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 37                               | 32                               | 26                               | 18                               | 3                                |                                  |                            | 17 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 27                               | 17                               | 24                               | 22                               | 6                                | 1                                |                            | 18 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 19 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |    |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                |                                  |                                  |                                  |                                  |                            | 20 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                |                                  |                                  |                            | 21 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 3                                |                                  | 10                               |                                  |                                  |                            | 22 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 13                               |                                  |                                  |                                  |                            | 23 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 6                                | 5                                |                                  |                            | 24 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 5                                |                                  |                                  |                            | 25 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                |                                  |                                  |                            | 26 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 3                                | 15                               | 6                                |                                  |                                  |                                  |                            | 27 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 3                                | 4                                | 17                               |                                  |                                  |                                  |                            | 28 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 2                                | 14                               | 8                                |                                  |                                  |                            | 29 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |    |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 3                                | 19                               | 6                                | 6                                | 5                                |                                  |                            | 30 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 3                                | 4                                | 23                               | 9                                |                                  |                                  |                            | 31 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 3                                | 7                                | 23                               | 15                               |                                  |                                  |                            | 32 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 5                                | 34                               | 12                               |                                  |                                  |                            | 33 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |    |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                                  |                                  |                            | 34 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 2                                |                                  | 2                                |                            | 35 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  |                            | 36 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                |                                  | 2                                |                                  |                            | 37 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                |                                  |                                  |                            | 38 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 1                                |                                  | 2                                |                            | 39 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 1                                |                                  |                                  | 2                          | 40 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 5                                | 1                                |                                  |                                  |                            | 41 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 8                                |                                  |                            | 42 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 9                                |                                  | 8                                |                                  |                            | 43 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |    |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 11                               | 4                                | 8                                |                                  |                            | 44 |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                | 10                               | 9                                | 1                                |                                  |                            | 45 |

TABLE P.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—

| Line No. | Occupation, district, and number of plants.                     | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |
|----------|-----------------------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|
|          |                                                                 |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 |
| 1        | Stranders, 16-inch—<br>Concluded.<br>Southern—<br>3 plants..... | 1913  | 7                    | 52.9                              | \$0.451                         | \$24.94                            | 4                                              | 1                    |                 |    | 2                    |    |                      |
| 2        |                                                                 | 1914  | 5                    | 55.5                              | .457                            | 25.79                              | 2                                              | 1                    |                 |    | 2                    |    |                      |
| 3        |                                                                 | 1915  | 5                    | 55.5                              | .425                            | 24.16                              | 2                                              | 1                    |                 |    | 2                    |    |                      |
| 4        | Total—<br>10 plants.....                                        | 1913  | 35                   | 53.8                              | .439                            | 24.21                              | 13                                             | 9                    | 3               |    | 10                   |    |                      |
| 5        |                                                                 | 1914  | 31                   | 53.8                              | .428                            | 23.23                              | 11                                             | 9                    | 2               |    | 9                    |    |                      |
| 6        | 14 plants.....                                                  | 1914  | 43                   | 56.9                              | .445                            | 25.57                              | 11                                             | 9                    | 2               |    | 21                   |    |                      |
| 7        |                                                                 | 1915  | 41                   | 57.9                              | .427                            | 25.12                              | 8                                              | 9                    | 3               |    | 21                   |    |                      |
| 8        | Stranders, 18-inch:<br>Eastern—<br>3 plants.....                | 1913  | 8                    | 56.8                              | .303                            | 17.37                              |                                                | 6                    |                 |    | 2                    |    |                      |
| 9        |                                                                 | 1914  | 7                    | 57.1                              | .276                            | 15.57                              |                                                | 5                    |                 |    | 2                    |    |                      |
| 10       |                                                                 | 1915  | 5                    | 58.0                              | .336                            | 19.33                              |                                                | 3                    |                 |    | 2                    |    |                      |
| 11       | Pittsburgh—<br>1 plant.....                                     | 1913  | 4                    | 59.5                              | .573                            | 34.06                              |                                                |                      | 4               |    |                      |    |                      |
| 12       |                                                                 | 1914  | 4                    | 59.5                              | .529                            | 31.48                              |                                                |                      | 4               |    |                      |    |                      |
| 13       |                                                                 | 1915  | 4                    | 59.5                              | .485                            | 28.83                              |                                                |                      | 4               |    |                      |    |                      |
| 14       | G. L. and M. W.—<br>2 plants.....                               | 1913  | 4                    | 63.4                              | .599                            | 37.99                              |                                                |                      |                 |    | 4                    |    |                      |
| 15       |                                                                 | 1914  | 4                    | 63.4                              | .579                            | 36.71                              |                                                |                      |                 |    | 4                    |    |                      |
| 16       | 3 plants.....                                                   | 1914  | 5                    | 62.0                              | .586                            | 36.31                              |                                                |                      | 1               |    | 4                    |    |                      |
| 17       |                                                                 | 1915  | 5                    | 62.5                              | .590                            | 36.84                              |                                                |                      | 1               |    | 4                    |    |                      |
| 18       | Total—<br>6 plants.....                                         | 1913  | 16                   | 59.1                              | .444                            | 26.70                              |                                                | 6                    | 4               |    | 6                    |    |                      |
| 19       |                                                                 | 1914  | 15                   | 59.4                              | .424                            | 25.45                              |                                                | 5                    | 4               |    | 6                    |    |                      |
| 20       | 7 plants.....                                                   | 1914  | 16                   | 59.3                              | .436                            | 26.03                              |                                                | 5                    | 5               |    | 6                    |    |                      |
| 21       |                                                                 | 1915  | 14                   | 60.0                              | .469                            | 28.30                              |                                                | 3                    | 5               |    | 6                    |    |                      |
| 22       | Stranders, all sizes:<br>Eastern—<br>12 plants.....             | 1913  | 107                  | 56.5                              | .291                            | 16.54                              |                                                | 37                   | 61              |    | 5                    | 4  |                      |
| 23       |                                                                 | 1914  | 108                  | 56.4                              | .282                            | 16.02                              |                                                | 79                   | 21              |    | 4                    | 4  |                      |
| 24       | 15 plants.....                                                  | 1914  | 141                  | 57.3                              | .292                            | 16.89                              |                                                | 50                   | 74              |    | 17                   |    |                      |
| 25       |                                                                 | 1915  | 138                  | 57.4                              | .290                            | 16.76                              |                                                | 43                   | 74              |    | 21                   |    |                      |
| 26       | Pittsburgh—<br>9 plants.....                                    | 1913  | 207                  | 60.6                              | .358                            | 21.53                              |                                                | 11                   | 72              |    | 124                  |    |                      |
| 27       |                                                                 | 1914  | 205                  | 60.7                              | .313                            | 18.78                              |                                                | 11                   | 99              |    | 95                   |    |                      |
| 28       | 13 plants.....                                                  | 1914  | 238                  | 60.2                              | .320                            | 19.05                              |                                                | 11                   | 35              | 70 | 122                  |    |                      |
| 29       |                                                                 | 1915  | 238                  | 59.2                              | .338                            | 19.73                              |                                                | 11                   | 184             |    | 43                   |    |                      |
| 30       | G. L. and M. W.—<br>12 plants.....                              | 1913  | 124                  | 57.5                              | .385                            | 22.25                              |                                                | 65                   | 18              |    | 41                   |    |                      |
| 31       |                                                                 | 1914  | 122                  | 57.2                              | .369                            | 21.15                              |                                                | 62                   | 17              |    | 43                   |    |                      |
| 32       | 19 plants.....                                                  | 1914  | 206                  | 57.9                              | .344                            | 19.99                              |                                                | 59                   | 88              |    | 59                   |    |                      |
| 33       |                                                                 | 1915  | 189                  | 58.1                              | .354                            | 20.88                              |                                                | 56                   | 57              |    | 76                   |    |                      |
| 34       | Southern—<br>9 plants.....                                      | 1913  | 53                   | 54.7                              | .308                            | 17.12                              |                                                | 37                   | 12              |    | 4                    |    |                      |
| 35       |                                                                 | 1914  | 50                   | 54.8                              | .275                            | 15.19                              |                                                | 36                   | 12              |    |                      | 2  |                      |
| 36       |                                                                 | 1915  | 50                   | 54.8                              | .264                            | 14.51                              |                                                | 36                   | 12              |    |                      | 2  |                      |
| 37       | Total—<br>42 plants.....                                        | 1913  | 491                  | 58.3                              | .345                            | 20.15                              |                                                | 150                  | 163             |    | 174                  | 4  |                      |
| 38       |                                                                 | 1914  | 485                  | 58.3                              | .316                            | 18.39                              |                                                | 188                  | 149             |    | 142                  | 6  |                      |
| 39       | 56 plants.....                                                  | 1914  | 635                  | 58.4                              | .318                            | 18.57                              |                                                | 156                  | 209             | 70 | 198                  | 2  |                      |
| 40       |                                                                 | 1915  | 615                  | 58.1                              | .326                            | 18.99                              |                                                | 146                  | 327             |    | 140                  | 2  |                      |
| 41       | Finishers, 8-inch:<br>Eastern—<br>2 plants.....                 | 1913  | 3                    | 55.2                              | .347                            | 19.47                              |                                                | 2                    | 1               |    |                      |    |                      |
| 42       |                                                                 | 1914  | 2                    | 55.8                              | .351                            | 19.56                              |                                                | 1                    | 1               |    |                      |    |                      |
| 43       | 5 plants.....                                                   | 1914  | 7                    | 57.6                              | .266                            | 15.26                              |                                                | 4                    | 1               |    | 2                    |    |                      |
| 44       |                                                                 | 1915  | 7                    | 57.6                              | .279                            | 15.94                              |                                                | 4                    | 1               |    | 2                    |    |                      |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,<sup>1</sup>  
*BAR MILLS*—Continued.

[illegible]

TABLE P.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—

| Line No. | Occupation, district, and number of plants.                      | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |       |                      |       |                      |       |
|----------|------------------------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-------|----------------------|-------|----------------------|-------|
|          |                                                                  |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60    | Over 60 and under 72 | 72    | Over 72 and under 84 | 84    |
|          | Finishers, 8-inch—<br>Concluded.<br>Pittsburgh—<br>6 plants..... | 1913  | 20                   | 59.1                              | \$0.367                         | \$21.89                            | .....                                          | 6                    | 8               | ..... | 6                    | ..... | .....                | ..... |
| 1        |                                                                  | 1914  | 20                   | 60.5                              | .324                            | 19.67                              | .....                                          | 6                    | 4               | ..... | 10                   | ..... | .....                | ..... |
| 2        |                                                                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 3        | 7 plants.....                                                    | 1914  | 22                   | 61.0                              | .329                            | 20.14                              | .....                                          | 6                    | 4               | ..... | 12                   | ..... | .....                | ..... |
| 4        |                                                                  | 1915  | 22                   | 60.1                              | .364                            | 21.93                              | 6                                              | .....                | 4               | ..... | 10                   | 2     | .....                | ..... |
| 5        | G. L. and M. W.—<br>2 plants.....                                | 1913  | 6                    | 64.0                              | .276                            | 17.51                              | .....                                          | 2                    | .....           | ..... | 4                    | ..... | .....                | ..... |
| 6        |                                                                  | 1914  | 6                    | 64.0                              | .301                            | 18.92                              | .....                                          | 1                    | 1               | ..... | 4                    | ..... | .....                | ..... |
| 7        | 3 plants.....                                                    | 1914  | 8                    | 64.0                              | .323                            | 20.44                              | .....                                          | 1                    | 1               | ..... | 5                    | ..... | .....                | ..... |
| 8        |                                                                  | 1915  | 8                    | 66.5                              | .313                            | 20.75                              | .....                                          | .....                | .....           | 2     | 6                    | ..... | .....                | ..... |
| 9        | Southern—<br>3 plants.....                                       | 1913  | 5                    | 55.9                              | .225                            | 12.77                              | 2                                              | .....                | 1               | ..... | 2                    | ..... | .....                | ..... |
| 10       |                                                                  | 1914  | 5                    | 55.9                              | .207                            | 11.57                              | 2                                              | .....                | 1               | ..... | 2                    | ..... | .....                | ..... |
| 11       |                                                                  | 1915  | 5                    | 55.9                              | .184                            | 10.05                              | 2                                              | .....                | 1               | ..... | 2                    | ..... | .....                | ..... |
| 12       | Total—<br>13 plants.....                                         | 1913  | 34                   | 59.2                              | .328                            | 19.53                              | 2                                              | 10                   | 10              | ..... | 12                   | ..... | .....                | ..... |
| 13       |                                                                  | 1914  | 33                   | 60.2                              | .304                            | 18.30                              | 2                                              | 8                    | 7               | ..... | 16                   | ..... | .....                | ..... |
| 14       | 18 plants.....                                                   | 1914  | 42                   | 60.4                              | .303                            | 18.37                              | 2                                              | 11                   | 7               | 1     | 21                   | ..... | .....                | ..... |
| 15       |                                                                  | 1915  | 42                   | 60.4                              | .319                            | 19.29                              | 8                                              | 4                    | 6               | 2     | 20                   | 2     | .....                | ..... |
| 16       | Finishers, 9-inch:<br>Eastern—<br>3 plants.....                  | 1913  | 6                    | 56.8                              | .267                            | 15.08                              | .....                                          | 4                    | .....           | ..... | 2                    | ..... | .....                | ..... |
| 17       |                                                                  | 1914  | 6                    | 56.8                              | .240                            | 13.38                              | .....                                          | 4                    | .....           | ..... | 2                    | ..... | .....                | ..... |
| 18       | 2 plants.....                                                    | 1914  | 4                    | 53.8                              | .288                            | 15.47                              | .....                                          | 4                    | .....           | ..... | .....                | ..... | .....                | ..... |
| 19       |                                                                  | 1915  | 4                    | 53.8                              | .288                            | 15.47                              | .....                                          | 4                    | .....           | ..... | .....                | ..... | .....                | ..... |
| 20       | Pittsburgh—<br>5 plants.....                                     | 1913  | 10                   | 60.7                              | .288                            | 17.04                              | .....                                          | 3                    | 2               | ..... | 5                    | ..... | .....                | ..... |
| 21       |                                                                  | 1914  | 10                   | 60.7                              | .288                            | 16.94                              | .....                                          | 3                    | 2               | ..... | 5                    | ..... | .....                | ..... |
| 22       | 6 plants.....                                                    | 1914  | 12                   | 60.3                              | .279                            | 16.41                              | .....                                          | 4                    | 2               | ..... | 6                    | ..... | .....                | ..... |
| 23       |                                                                  | 1915  | 12                   | 59.3                              | .281                            | 16.40                              | 3                                              | 1                    | 2               | ..... | 6                    | ..... | .....                | ..... |
| 24       | G. L. and M. W.—<br>3 plants.....                                | 1913  | 11                   | 68.2                              | .295                            | 19.96                              | .....                                          | .....                | .....           | ..... | 10                   | 1     | .....                | ..... |
| 25       |                                                                  | 1914  | 11                   | 68.2                              | .295                            | 19.96                              | .....                                          | .....                | .....           | 1     | 9                    | 1     | .....                | ..... |
| 26       | 3 plants.....                                                    | 1914  | 12                   | 67.2                              | .328                            | 21.86                              | .....                                          | .....                | .....           | 2     | 10                   | ..... | .....                | ..... |
| 27       |                                                                  | 1915  | 12                   | 67.2                              | .328                            | 21.86                              | .....                                          | .....                | .....           | 2     | 10                   | ..... | .....                | ..... |
| 28       | Southern—<br>3 plants.....                                       | 1913  | 5                    | 56.0                              | .202                            | 11.37                              | .....                                          | 2                    | 3               | ..... | .....                | ..... | .....                | ..... |
| 29       |                                                                  | 1914  | 5                    | 56.0                              | .203                            | 11.42                              | .....                                          | 2                    | 3               | ..... | .....                | ..... | .....                | ..... |
| 30       |                                                                  | 1915  | 5                    | 56.0                              | .205                            | 11.51                              | .....                                          | 2                    | 3               | ..... | .....                | ..... | .....                | ..... |
| 31       | Total—<br>14 plants.....                                         | 1913  | 32                   | 61.8                              | .273                            | 16.79                              | .....                                          | 9                    | 5               | ..... | 17                   | 1     | .....                | ..... |
| 32       |                                                                  | 1914  | 32                   | 61.8                              | .268                            | 16.45                              | .....                                          | 9                    | 5               | 1     | 16                   | 1     | .....                | ..... |
| 33       | 14 plants.....                                                   | 1914  | 33                   | 61.4                              | .286                            | 17.52                              | .....                                          | 10                   | 5               | 2     | 16                   | ..... | .....                | ..... |
| 34       |                                                                  | 1915  | 33                   | 61.0                              | .287                            | 17.53                              | 3                                              | 7                    | 5               | 2     | 16                   | ..... | .....                | ..... |
| 35       | Finishers, 10-inch:<br>Eastern—<br>1 plant.....                  | 1913  | 2                    | 57.5                              | .396                            | 22.77                              | .....                                          | .....                | 2               | ..... | .....                | ..... | .....                | ..... |
| 36       |                                                                  | 1914  | 2                    | 57.5                              | .316                            | 18.14                              | .....                                          | .....                | 2               | ..... | .....                | ..... | .....                | ..... |
| 37       | 2 plants.....                                                    | 1914  | 4                    | 60.9                              | .309                            | 18.83                              | .....                                          | .....                | 2               | ..... | 2                    | ..... | .....                | ..... |
| 38       |                                                                  | 1915  | 4                    | 60.9                              | .332                            | 20.13                              | .....                                          | .....                | 2               | ..... | 2                    | ..... | .....                | ..... |
| 39       | Pittsburgh—<br>5 plants.....                                     | 1913  | 19                   | 55.7                              | .454                            | 25.26                              | 9                                              | .....                | 2               | ..... | 8                    | ..... | .....                | ..... |
| 40       |                                                                  | 1914  | 20                   | 56.1                              | .422                            | 23.37                              | 9                                              | .....                | 2               | ..... | 9                    | ..... | .....                | ..... |
| 41       | 8 plants.....                                                    | 1914  | 26                   | 56.1                              | .417                            | 23.15                              | 9                                              | 4                    | 2               | ..... | 11                   | ..... | .....                | ..... |
| 42       |                                                                  | 1915  | 25                   | 55.1                              | .430                            | 23.14                              | 12                                             | 1                    | 2               | ..... | 8                    | 2     | .....                | ..... |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | Line<br>No. |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|-------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                | 2                                | 2                                | 7                                | 3                                | 4                                |                                  | 1           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 1                                | 4                                | 2                                | 10                               | 2                                | 1                                |                                  | 2           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 4                                | 2                                | 12                               |                                  |                                  |                                  | 3           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 3                                | 11                               | 5                                | 1                                |                                  | 4           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 2                                |                                  |                                  |                                  | 5           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 1                                | 1                                |                                  |                                  | 6           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 2                                |                                  |                                  |                                  | 7           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 3                                | 1                                |                                  |                                  | 8           |
|                                               |                                |                                |                                 |                                  |                                  | 1                                |                                  |                                  | 2                                | 2                                |                                  |                                  |                                  |                                  | 9           |
|                                               |                                |                                |                                 |                                  |                                  | 1                                |                                  |                                  | 4                                |                                  |                                  |                                  |                                  |                                  | 10          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                |                                  | 1                                | 2                                |                                  |                                  |                                  |                                  |                                  | 11          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 1                                | 2                                | 6                                | 6                                | 12                               | 3                                | 4                                |                                  | 12          |
|                                               |                                |                                |                                 |                                  |                                  | 1                                |                                  | 1                                | 10                               | 4                                | 13                               | 3                                | 1                                |                                  | 13          |
|                                               |                                |                                |                                 |                                  |                                  | 3                                |                                  | 1                                | 12                               | 4                                | 16                               | 5                                | 1                                |                                  | 14          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                | 2                                | 1                                | 8                                | 5                                | 16                               | 7                                | 1                                |                                  | 15          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 2                                |                                  |                                  |                                  | 16          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                |                                  |                                  |                                  | 2                                | 2                                |                                  |                                  |                                  | 17          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                |                                  |                                  |                                  | 18          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                |                                  |                                  |                                  | 19          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 1                                |                                  |                                  | 5                                | 2                                | 1                                |                                  |                                  | 20          |
|                                               |                                |                                |                                 |                                  | 1                                | 1                                |                                  | 1                                |                                  | 4                                | 2                                | 2                                |                                  |                                  | 21          |
|                                               |                                |                                |                                 |                                  | 1                                | 1                                |                                  |                                  | 2                                | 4                                | 2                                | 2                                |                                  |                                  | 22          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                | 2                                | 4                                | 4                                |                                  |                                  |                                  | 23          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 1                                |                                  |                                  | 4                                | 4                                | 2                                |                                  |                                  | 24          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 1                                |                                  |                                  | 4                                | 4                                | 2                                |                                  |                                  | 25          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 4                                | 4                                |                                  |                                  | 26          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 4                                | 4                                |                                  |                                  | 27          |
|                                               |                                |                                |                                 |                                  |                                  | 1                                | 1                                | 1                                | 1                                |                                  | 1                                |                                  |                                  |                                  | 28          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 1                                | 3                                |                                  | 1                                |                                  |                                  |                                  |                                  | 29          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 1                                | 1                                |                                  | 1                                |                                  |                                  |                                  | 30          |
|                                               |                                |                                |                                 |                                  |                                  | 1                                | 3                                | 2                                | 3                                | 11                               | 9                                | 3                                |                                  |                                  | 31          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 11                               | 8                                | 4                                |                                  |                                  | 32          |
|                                               |                                |                                |                                 |                                  |                                  | 1                                | 1                                | 1                                | 3                                | 2                                | 11                               | 6                                |                                  |                                  | 33          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 1                                | 3                                | 3                                | 10                               | 11                               | 4                                |                                  |                                  | 34          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 35          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 1                                | 2                                |                                  |                                  |                                  | 36          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                | 2                                |                                  |                                  |                                  | 37          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                |                                  | 3                                |                                  |                                  |                                  | 38          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 3                                | 11                               | 2                                |                                  | 39          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 4                                | 11                               | 2                                | 2                                | 40          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 41          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 7                                | 14                               | 2                                |                                  | 42          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 7                                | 7                                | 9                                |                                  |             |

TABLE P.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—

| Line No. | Occupation, district, and number of plants.                            | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |       |                      |       |                      |       |
|----------|------------------------------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-------|----------------------|-------|----------------------|-------|
|          |                                                                        |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60    | Over 60 and under 72 | 72    | Over 72 and under 84 | 84    |
|          | Finishers, 10-inch—<br>Concluded.<br>G. L. and M. W.—<br>2 plants..... | 1913  | 4                    | 56.8                              | \$0.403                         | \$22.94                            | .....                                          | 1                    | 2               | ..... | 1                    | ..... | .....                |       |
| 1        |                                                                        | 1914  | 3                    | 58.3                              | .399                            | 23.34                              | .....                                          | .....                | 2               | ..... | 1                    | ..... | .....                |       |
| 2        |                                                                        |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 3        | 7 plants.....                                                          | 1914  | 11                   | 60.3                              | .402                            | 24.46                              | .....                                          | 2                    | 4               | 1     | 4                    | ..... | .....                |       |
| 4        |                                                                        | 1915  | 11                   | 60.7                              | .436                            | 26.88                              | .....                                          | 3                    | 2               | 1     | 5                    | ..... | .....                |       |
| 5        | Southern—<br>2 plants.....                                             | 1913  | 5                    | 51.0                              | .341                            | 16.72                              | 3                                              | .....                | 2               | ..... | .....                | ..... | .....                |       |
| 6        |                                                                        | 1914  | 4                    | 49.2                              | .374                            | 17.90                              | 3                                              | .....                | 1               | ..... | .....                | ..... | .....                |       |
| 7        |                                                                        | 1915  | 4                    | 49.2                              | .374                            | 17.87                              | 3                                              | .....                | 1               | ..... | .....                | ..... | .....                |       |
| 8        | Total—<br>10 plants.....                                               | 1913  | 30                   | 55.2                              | .424                            | 23.36                              | 12                                             | 1                    | 8               | ..... | 9                    | ..... | .....                |       |
| 9        |                                                                        | 1914  | 29                   | 55.5                              | .406                            | 22.25                              | 12                                             | .....                | 7               | ..... | 10                   | ..... | .....                |       |
| 10       | 19 plants.....                                                         | 1914  | 45                   | 57.0                              | .400                            | 22.62                              | 12                                             | 6                    | 9               | 1     | 17                   | ..... | .....                |       |
| 11       |                                                                        | 1915  | 44                   | 56.5                              | .417                            | 23.32                              | 15                                             | 4                    | 7               | 1     | 15                   | 2     | .....                |       |
| 12       | Finishers, 12-inch:<br>Eastern—<br>7 plants.....                       | 1913  | 14                   | 56.5                              | .253                            | 14.20                              | .....                                          | 10                   | .....           | ..... | 4                    | ..... | .....                |       |
| 13       |                                                                        | 1914  | 13                   | 56.7                              | .253                            | 14.17                              | .....                                          | 9                    | .....           | ..... | 4                    | ..... | .....                |       |
| 14       | 9 plants.....                                                          | 1914  | 17                   | 56.5                              | .274                            | 15.43                              | .....                                          | 11                   | 2               | ..... | 4                    | ..... | .....                |       |
| 15       |                                                                        | 1915  | 15                   | 56.4                              | .275                            | 15.59                              | .....                                          | 11                   | .....           | 1     | 3                    | ..... | .....                |       |
| 16       | Pittsburgh—<br>6 plants.....                                           | 1913  | 15                   | 63.5                              | .370                            | 22.85                              | .....                                          | 3                    | 2               | 1     | 7                    | 2     | .....                |       |
| 17       |                                                                        | 1914  | 14                   | 63.5                              | .287                            | 17.96                              | .....                                          | 3                    | 2               | ..... | 5                    | 3     | .....                |       |
| 18       | 7 plants.....                                                          | 1914  | 16                   | 63.6                              | .323                            | 20.35                              | .....                                          | 3                    | 2               | 1     | 7                    | 3     | .....                |       |
| 19       |                                                                        | 1915  | 16                   | 62.9                              | .406                            | 25.04                              | 3                                              | .....                | 2               | 1     | 8                    | 2     | .....                |       |
| 20       | G. L. and M. W.—<br>2 plants.....                                      | 1913  | 6                    | 70.0                              | .413                            | 29.10                              | .....                                          | .....                | .....           | ..... | 4                    | 2     | .....                |       |
| 21       |                                                                        | 1914  | 6                    | 70.0                              | .384                            | 27.04                              | .....                                          | .....                | .....           | ..... | 4                    | 2     | .....                |       |
| 22       | 6 plants.....                                                          | 1914  | 11                   | 63.8                              | .366                            | 23.06                              | 1                                              | 2                    | .....           | ..... | 6                    | 2     | .....                |       |
| 23       |                                                                        | 1915  | 11                   | 64.8                              | .359                            | 23.34                              | .....                                          | 3                    | .....           | ..... | 6                    | 2     | .....                |       |
| 24       | Southern—<br>2 plants.....                                             | 1913  | 3                    | 63.9                              | .448                            | 28.86                              | .....                                          | .....                | 1               | ..... | 2                    | ..... | .....                |       |
| 25       |                                                                        | 1914  | 2                    | 65.9                              | .370                            | 24.67                              | .....                                          | .....                | 1               | ..... | .....                | 1     | .....                |       |
| 26       |                                                                        | 1915  | 2                    | 65.9                              | .358                            | 23.91                              | .....                                          | .....                | 1               | ..... | .....                | 1     | .....                |       |
| 27       | Total—<br>17 plants.....                                               | 1913  | 38                   | 62.0                              | .340                            | 21.12                              | .....                                          | .....                | 13              | 3     | 1                    | 17    | 4                    | ..... |
| 28       |                                                                        | 1914  | 35                   | 62.2                              | .295                            | 18.49                              | .....                                          | .....                | 12              | 3     | 1                    | 13    | 6                    | ..... |
| 29       | 24 plants.....                                                         | 1914  | 46                   | 61.1                              | .317                            | 19.37                              | 1                                              | 16                   | 5               | 1     | 17                   | 6     | .....                |       |
| 30       |                                                                        | 1915  | 44                   | 61.3                              | .347                            | 21.34                              | 3                                              | 14                   | 3               | 2     | 17                   | 5     | .....                |       |
| 31       | Finishers, 13-inch, 14-inch, and 15-inch:<br>Eastern—<br>1 plant.....  | 1913  | 4                    | 72.0                              | .297                            | 21.38                              | .....                                          | .....                | .....           | ..... | .....                | 4     | .....                |       |
| 32       |                                                                        | 1914  | 4                    | 72.0                              | .349                            | 25.13                              | .....                                          | .....                | .....           | ..... | .....                | 4     | .....                |       |
| 33       | 3 plants.....                                                          | 1914  | 7                    | 66.8                              | .346                            | 23.09                              | .....                                          | .....                | 1               | ..... | 2                    | 4     | .....                |       |
| 34       |                                                                        | 1915  | 8                    | 65.7                              | .333                            | 21.72                              | .....                                          | .....                | 2               | ..... | 2                    | 4     | .....                |       |
| 35       | Pittsburgh—<br>2 plants.....                                           | 1913  | 7                    | 59.4                              | .378                            | 21.61                              | .....                                          | 3                    | .....           | 2     | .....                | 2     | .....                |       |
| 36       |                                                                        | 1914  | 7                    | 59.4                              | .321                            | 18.75                              | .....                                          | 3                    | .....           | 2     | .....                | 2     | .....                |       |
| 37       |                                                                        | 1915  | 7                    | 57.7                              | .342                            | 19.57                              | 3                                              | .....                | .....           | 2     | 2                    | ..... | .....                |       |
| 38       | G. L. and M. W.—<br>2 plants.....                                      | 1913  | 4                    | 64.0                              | .342                            | 21.88                              | .....                                          | .....                | .....           | 2     | .....                | ..... | .....                |       |
| 39       |                                                                        | 1914  | 4                    | 64.0                              | .379                            | 24.30                              | .....                                          | .....                | .....           | 2     | .....                | ..... | .....                |       |
| 40       |                                                                        | 1915  | 4                    | 61.0                              | .443                            | 27.16                              | .....                                          | 2                    | .....           | ..... | 2                    | ..... | .....                |       |
| 41       | Total—<br>5 plants.....                                                | 1913  | 15                   | 64.0                              | .347                            | 21.62                              | .....                                          | 3                    | .....           | 4     | 2                    | 6     | .....                |       |
| 42       |                                                                        | 1914  | 15                   | 64.0                              | .344                            | 21.93                              | .....                                          | 3                    | .....           | 4     | 2                    | 6     | .....                |       |
| 43       | 7 plants.....                                                          | 1914  | 18                   | 63.3                              | .344                            | 21.67                              | .....                                          | 3                    | 1               | 4     | 4                    | 6     | .....                |       |
| 44       |                                                                        | 1915  | 19                   | 61.8                              | .360                            | 22.07                              | 3                                              | 2                    | 2               | 2     | 6                    | 4     | .....                |       |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | Line No. |
|-----------------------------------------------|--------------------|--------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-------------------|----------|
| 6 and under 7 cts.                            | 7 and under 8 cts. | 8 and under 9 cts. | 9 and under 10 cts. | 10 and under 12 cts. | 12 and under 14 cts. | 14 and under 16 cts. | 16 and under 18 cts. | 18 and under 20 cts. | 20 and under 25 cts. | 25 and under 30 cts. | 30 and under 40 cts. | 40 and under 50 cts. | 50 and under 60 cts. | 60 and under 70 cts. | 70 cts. and over. |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | 1        |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      | 2                    | 2                    |                      |                      |                   | 2        |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      | 4                    | 4                    |                      |                      |                   | 3        |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 1                    |                      | 3                    | 4                    | 2                    |                      |                   | 4        |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 1                    |                      |                      |                      | 1                    | 2                    |                   | 5        |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 2                    |                      |                      | 3                    |                      |                      |                   | 6        |
|                                               |                    |                    |                     |                      |                      |                      |                      | 1                    | 1                    |                      |                      | 3                    |                      |                      |                   | 7        |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 2                    | 1                    | 7                    | 16                   | 2                    | 2                    |                   | 8        |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 1                    | 4                    | 7                    | 15                   | 2                    |                      |                   | 9        |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 3                    | 4                    | 13                   | 21                   | 4                    |                      |                   | 10       |
|                                               |                    |                    |                     |                      |                      |                      |                      | 1                    | 2                    | 2                    | 13                   | 14                   | 10                   | 2                    |                   | 11       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      | 2                    |                      | 2                    | 4                    | 2                    | 3                    | 1                    |                      |                      |                   | 12       |
|                                               |                    |                    |                     |                      |                      |                      | 5                    | 1                    |                      | 4                    | 1                    | 2                    |                      |                      |                   | 13       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      |                      | 5                    | 3                    |                      | 4                    | 1                    | 3                    | 1                    |                      |                   | 14       |
|                                               |                    |                    |                     |                      |                      | 1                    | 1                    | 4                    | 1                    | 4                    | 2                    | 1                    |                      | 1                    |                   | 15       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 5                    | 6                    | 1                    | 2                    | 1                    |                   | 16       |
|                                               |                    |                    |                     |                      |                      |                      | 1                    | 1                    | 7                    | 3                    | 3                    | 2                    |                      |                      |                   | 17       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      |                      | 1                    | 1                    |                      | 7                    | 4                    | 2                    | 1                    | 1                    |                   | 18       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 2                    | 4                    | 4                    | 2                    | 2                    |                      | 2                 | 19       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      | 2                    |                      |                      |                      |                   | 20       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 2                    | 2                    |                      | 2                    |                      |                   | 21       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      |                      |                      | 1                    | 1                    | 2                    | 2                    | 2                    | 3                    |                      |                   | 22       |
|                                               |                    |                    |                     |                      |                      |                      | 1                    |                      | 1                    | 2                    | 3                    | 2                    | 2                    |                      |                   | 23       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      | 1                    |                      | 2                    |                      |                   | 24       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      | 1                    | 1                    |                      |                      |                   | 25       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      | 1                    | 1                    |                      |                      |                   | 26       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      | 2                    |                      | 2                    | 4                    | 9                    | 12                   | 2                    | 4                    | 3                    |                   | 27       |
|                                               |                    |                    |                     |                      |                      |                      | 6                    | 2                    |                      | 13                   | 7                    | 5                    | 2                    |                      |                   | 28       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      |                      | 6                    | 5                    | 1                    | 13                   | 7                    | 8                    | 5                    | 1                    |                   | 29       |
|                                               |                    |                    |                     |                      |                      | 1                    | 2                    | 4                    | 4                    | 10                   | 10                   | 6                    | 4                    | 1                    | 2                 | 30       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 4                    |                      |                      |                      |                      |                   | 31       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      | 4                    |                      |                      |                      |                   | 32       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      | 6                    | 1                    |                      |                   | 33       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 2                    | 5                    | 1                    |                      |                      |                   | 34       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 2                    | 2                    | 2                    | 1                    |                      |                   | 35       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 2                    | 4                    | 1                    |                      |                      |                   | 36       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 2                    | 4                    | 1                    |                      |                      |                   | 37       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      | 4                    |                      |                      |                      |                   | 38       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | 39       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      | 4                    |                      |                      |                   | 40       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 6                    | 6                    | 2                    | 1                    |                      |                   | 41       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 2                    | 12                   | 1                    |                      |                      |                   | 42       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 2                    | 14                   | 2                    |                      |                      |                   | 43       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 4                    | 9                    | 6                    |                      |                      |                   | 44       |

TABLE P.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Finishers, 16-inch: Eastern—                | 1913  | 2                    | 57.5                              | \$0.361                         | \$20.76                            |                                                |                      | 2               |    |                      |    |                      |    |
| 2        | 1 plant.....                                | 1914  | 1                    | 57.5                              | .394                            | 22.66                              |                                                |                      | 1               |    |                      |    |                      |    |
| 3        | 3 plants.....                               | 1914  | 4                    | 62.7                              | .348                            | 21.73                              |                                                |                      | 1               | 1  | 2                    |    |                      |    |
| 4        | Pittsburgh—                                 | 1915  | 5                    | 61.6                              | .300                            | 18.33                              |                                                |                      | 2               |    | 3                    |    |                      |    |
| 5        | 2 plants.....                               | 1913  | 4                    | 64.3                              | .413                            | 26.55                              |                                                |                      |                 |    | 4                    |    |                      |    |
| 6        |                                             | 1914  | 3                    | 64.3                              | .282                            | 18.13                              |                                                |                      |                 |    | 3                    |    |                      |    |
| 7        | 4 plants.....                               | 1914  | 6                    | 63.4                              | .436                            | 27.80                              |                                                |                      | 1               |    | 5                    |    |                      |    |
| 8        | G. L. and M. W.—                            | 1915  | 6                    | 63.4                              | .471                            | 30.01                              |                                                |                      | 1               |    | 5                    |    |                      |    |
| 9        | 2 plants.....                               | 1913  | 9                    | 53.3                              | .442                            | 23.87                              | 3                                              | 4                    |                 |    | 2                    |    |                      |    |
| 10       |                                             | 1914  | 9                    | 53.3                              | .487                            | 26.84                              | 3                                              | 4                    |                 |    | 2                    |    |                      |    |
| 11       | 4 plants.....                               | 1914  | 13                   | 56.9                              | .435                            | 24.96                              | 3                                              | 4                    |                 | 1  | 5                    |    |                      |    |
| 12       | Southern—                                   | 1915  | 13                   | 56.9                              | .375                            | 21.36                              | 3                                              | 4                    |                 | 1  | 5                    |    |                      |    |
| 13       | 3 plants.....                               | 1913  | 6                    | 54.0                              | .270                            | 15.25                              | 3                                              | 1                    |                 | 1  | 1                    |    |                      |    |
| 14       |                                             | 1914  | 5                    | 55.5                              | .245                            | 13.96                              | 2                                              | 1                    |                 | 1  | 1                    |    |                      |    |
| 15       |                                             | 1915  | 5                    | 55.5                              | .249                            | 14.20                              | 2                                              | 1                    |                 | 1  | 1                    |    |                      |    |
| 16       | Total—                                      | 1913  | 21                   | 56.0                              | .380                            | 21.62                              | 6                                              | 5                    | 2               | 1  | 7                    |    |                      |    |
| 17       | 8 plants.....                               | 1914  | 18                   | 56.0                              | .380                            | 21.57                              | 5                                              | 5                    | 1               | 1  | 6                    |    |                      |    |
| 18       | 14 plants.....                              | 1914  | 28                   | 58.9                              | .389                            | 23.14                              | 5                                              | 5                    | 2               | 3  | 13                   |    |                      |    |
| 19       |                                             | 1915  | 29                   | 58.8                              | .360                            | 21.39                              | 5                                              | 5                    | 3               | 2  | 14                   |    |                      |    |
| 20       | Finishers, 18-inch: Eastern—                | 1913  | 4                    | 58.5                              | .302                            | 17.62                              |                                                | 2                    |                 |    | 2                    |    |                      |    |
| 21       | 2 plants.....                               | 1914  | 3                    | 60.0                              | .231                            | 13.43                              |                                                | 1                    |                 |    | 2                    |    |                      |    |
| 22       |                                             | 1915  | 3                    | 60.0                              | .277                            | 16.33                              |                                                | 1                    |                 |    | 2                    |    |                      |    |
| 23       | Pittsburgh—                                 | 1913  | 3                    | 57.3                              | .640                            | 37.29                              |                                                | 1                    | 2               |    |                      |    |                      |    |
| 24       | 2 plants.....                               | 1914  | 3                    | 57.7                              | .600                            | 34.93                              |                                                | 1                    | 2               |    |                      |    |                      |    |
| 25       |                                             | 1915  | 3                    | 57.3                              | .560                            | 32.55                              |                                                | 1                    | 2               |    |                      |    |                      |    |
| 26       | G. L. and M. W.—                            | 1913  | 4                    | 63.4                              | .394                            | 24.95                              |                                                |                      |                 |    | 4                    |    |                      |    |
| 27       | 2 plants.....                               | 1914  | 4                    | 63.4                              | .394                            | 24.95                              |                                                |                      |                 | 1  | 3                    |    |                      |    |
| 28       |                                             | 1915  | 4                    | 64.0                              | .375                            | 23.99                              |                                                |                      |                 | 1  | 3                    |    |                      |    |
| 29       | Southern—                                   | 1913  | 1                    | 52.0                              | .274                            | 14.25                              |                                                | 1                    |                 |    |                      |    |                      |    |
| 30       | 1 plant.....                                | 1914  | 1                    | 52.0                              | .253                            | 13.16                              |                                                | 1                    |                 |    |                      |    |                      |    |
| 31       |                                             | 1915  | 1                    | 52.0                              | .282                            | 14.66                              |                                                | 1                    |                 |    |                      |    |                      |    |
| 32       | Total—                                      | 1913  | 12                   | 59.3                              | .415                            | 24.70                              |                                                | 4                    | 2               |    | 6                    |    |                      |    |
| 33       | 7 plants.....                               | 1914  | 11                   | 59.8                              | .393                            | 23.46                              |                                                | 3                    | 2               | 1  | 5                    |    |                      |    |
| 34       |                                             | 1915  | 11                   | 60.0                              | .390                            | 23.39                              |                                                | 3                    | 2               | 1  | 5                    |    |                      |    |
| 35       | Finishers, all sizes: Eastern—              | 1913  | 35                   | 58.5                              | .289                            | 16.85                              |                                                | 3                    | 28              |    |                      |    | 4                    |    |
| 36       | 10 plants.....                              | 1914  | 31                   | 59.0                              | .276                            | 16.23                              |                                                | 2                    | 22              | 3  |                      |    | 4                    |    |
| 37       | 14 plants.....                              | 1914  | 46                   | 59.1                              | .292                            | 17.29                              |                                                | 4                    | 24              | 3  | 15                   |    |                      |    |
| 38       | Pittsburgh—                                 | 1915  | 46                   | 59.2                              | .294                            | 17.44                              |                                                | 4                    | 22              | 3  | 17                   |    |                      |    |
| 39       | 11 plants.....                              | 1913  | 78                   | 59.6                              | .392                            | 23.08                              |                                                | 19                   | 30              |    | 29                   |    |                      |    |
| 40       |                                             | 1914  | 77                   | 59.9                              | .347                            | 20.42                              |                                                |                      | 30              |    | 47                   |    |                      |    |
| 41       | 14 plants.....                              | 1914  | 92                   | 59.9                              | .362                            | 21.42                              |                                                |                      | 36              |    | 56                   |    |                      |    |
| 42       |                                             | 1915  | 91                   | 59.1                              | .390                            | 22.78                              |                                                | 25                   | 22              |    | 44                   |    |                      |    |
| 43       | G. L. and M. W.—                            | 1913  | 44                   | 63.0                              | .362                            | 22.57                              |                                                | 9                    | 4               |    | 31                   |    |                      |    |
| 44       | 10 plants.....                              | 1914  | 43                   | 63.2                              | .373                            | 23.35                              |                                                | 9                    | 3               |    | 31                   |    |                      |    |
| 45       | 17 plants.....                              | 1914  | 63                   | 62.4                              | .376                            | 23.33                              |                                                |                      | 13              |    | 50                   |    |                      |    |
| 46       |                                             | 1915  | 63                   | 62.8                              | .370                            | 23.22                              |                                                |                      | 13              |    | 50                   |    |                      |    |



AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 1           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                            | 2           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  |                                  |                            | 3           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 1                                |                                  | 2                                |                                  | 2                                | 1                                |                                  |                            | 4           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 5           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                |                                  | 2                                | 2                                |                                  |                            | 6           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  |                                  |                            | 7           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 2                                |                                  | 2                                |                                  |                                  | 2                          | 8           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 9           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 2                                | 4                                |                            | 10          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                |                                  | 4                                | 2                          | 11          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  | 4                                | 1                                | 4                                | 2                          | 12          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  | 4                                | 7                                |                                  |                            | 13          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 1                                | 3                                |                                  |                                  | 1                                | 1                                |                                  |                            | 14          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 3                                | 1                                |                                  | 1                                |                                  |                                  |                            | 15          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 3                                | 1                                |                                  | 1                                |                                  |                                  |                            | 16          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 1                                | 3                                |                                  |                                  |                                  |                                  |                                  |                            | 17          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 4                                | 2                                |                                  | 8                                | 5                                | 4                                | 2                          | 18          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 5                                | 5                                |                                  | 8                                | 2                                | 4                                | 2                          | 19          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 1                                | 3                                | 7                                |                                  | 9                                | 7                                |                                  | 2                          | 20          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 21          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  | 3                                |                                  |                                  |                            | 22          |
|                                               |                                |                                |                                 |                                  | 1                                |                                  |                                  | 1                                |                                  | 1                                |                                  | 1                                |                                  |                                  |                            | 23          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  |                                  | 2                          | 24          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  |                                  | 2                          | 25          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 26          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                |                                  |                            | 27          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                |                                  |                            | 28          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                |                                  |                            | 29          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  |                                  |                                  |                                  |                            | 30          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  |                                  |                                  |                                  |                            | 31          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 32          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  | 6                                | 2                                |                                  | 2                          | 33          |
|                                               |                                |                                |                                 |                                  | 1                                |                                  |                                  | 1                                |                                  | 1                                |                                  | 4                                | 2                                |                                  |                            | 34          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 2                                |                                  | 4                                | 2                                |                                  | 2                          | 35          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 36          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                |                                  | 2                                | 6                                | 9                                |                                  | 15                               | 1                                |                                  |                            | 37          |
|                                               |                                |                                |                                 |                                  | 1                                | 2                                | 5                                | 2                                |                                  | 7                                |                                  | 12                               | 2                                |                                  |                            | 38          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 39          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 40          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 41          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 42          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 43          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 44          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 45          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 46          |

TABLE P.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, 1913 TO 1915—

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                       |                  |       |                       |       |                       |       |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|-----------------------|------------------|-------|-----------------------|-------|-----------------------|-------|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56. | 56 and under 60. | 60.   | Over 60 and under 72. | 72.   | Over 72 and under 84. | 84.   |
|          | Finishers, all sizes—                       |       |                      |                                   |                                 |                                    |                                                |                       |                  |       |                       |       |                       |       |
|          | Concluded.                                  |       |                      |                                   |                                 |                                    |                                                |                       |                  |       |                       |       |                       |       |
| 1        | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                       |                  |       |                       |       |                       |       |
| 2        | 9 plants.....                               | 1913  | 25                   | 55.3                              | \$0.283                         | \$15.87                            | .....                                          | 17                    | 5                | ..... | 3                     | ..... | .....                 | ..... |
| 3        |                                             | 1914  | 22                   | 55.3                              | .262                            | 14.49                              | .....                                          | 15                    | 5                | ..... | 2                     | ..... | .....                 | ..... |
|          |                                             | 1915  | 22                   | 55.3                              | .258                            | 14.21                              | .....                                          | 15                    | 5                | ..... | 2                     | ..... | .....                 | ..... |
| 4        | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                       |                  |       |                       |       |                       |       |
| 5        | 40 plants.....                              | 1913  | 182                  | 59.6                              | .350                            | 20.77                              | .....                                          | 48                    | 67               | ..... | 63                    | 4     | .....                 | ..... |
|          |                                             | 1914  | 173                  | 60.0                              | .330                            | 19.64                              | .....                                          | 26                    | 60               | 3     | 80                    | 4     | .....                 | ..... |
| 6        | 54 plants.....                              | 1914  | 223                  | 60.0                              | .341                            | 20.42                              | .....                                          | 19                    | 78               | 3     | 123                   | ..... | .....                 | ..... |
| 7        |                                             | 1915  | 222                  | 59.8                              | .352                            | 20.95                              | .....                                          | 44                    | 62               | 3     | 113                   | ..... | .....                 | ..... |
|          | Hook-ups, 12-inch:                          |       |                      |                                   |                                 |                                    |                                                |                       |                  |       |                       |       |                       |       |
| 8        | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                       |                  |       |                       |       |                       |       |
| 9        | 6 plants.....                               | 1913  | 16                   | 56.2                              | .229                            | 12.99                              | .....                                          | 12                    | .....            | ..... | 4                     | ..... | .....                 | ..... |
|          |                                             | 1914  | 16                   | 56.2                              | .244                            | 13.76                              | .....                                          | 12                    | .....            | ..... | 4                     | ..... | .....                 | ..... |
| 10       | 8 plants.....                               | 1914  | 20                   | 56.1                              | .243                            | 13.68                              | .....                                          | 14                    | 2                | ..... | 4                     | ..... | .....                 | ..... |
| 11       |                                             | 1915  | 17                   | 56.6                              | .234                            | 13.29                              | .....                                          | 11                    | 2                | ..... | 4                     | ..... | .....                 | ..... |
| 12       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                       |                  |       |                       |       |                       |       |
| 13       | 6 plants.....                               | 1913  | 34                   | 61.0                              | .317                            | 18.87                              | .....                                          | 12                    | 2                | ..... | 20                    | ..... | .....                 | ..... |
|          |                                             | 1914  | 34                   | 59.8                              | .226                            | 13.40                              | .....                                          | 15                    | 2                | ..... | 17                    | ..... | .....                 | ..... |
| 14       | 7 plants.....                               | 1914  | 36                   | 60.1                              | .232                            | 13.88                              | .....                                          | 15                    | 2                | ..... | 19                    | ..... | .....                 | ..... |
| 15       |                                             | 1915  | 30                   | 60.8                              | .296                            | 17.49                              | 9                                              | .....                 | 2                | ..... | 18                    | 1     | .....                 | ..... |
| 16       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                       |                  |       |                       |       |                       |       |
| 17       | 2 plants.....                               | 1913  | 11                   | 64.9                              | .390                            | 25.91                              | 3                                              | .....                 | .....            | ..... | 8                     | ..... | .....                 | ..... |
|          |                                             | 1914  | 11                   | 64.9                              | .364                            | 24.05                              | 3                                              | .....                 | .....            | ..... | 8                     | ..... | .....                 | ..... |
| 18       | 3 plants.....                               | 1914  | 13                   | 63.4                              | .348                            | 22.51                              | 3                                              | 2                     | .....            | ..... | 8                     | ..... | .....                 | ..... |
| 19       |                                             | 1915  | 13                   | 63.4                              | .366                            | 23.73                              | 3                                              | 2                     | .....            | ..... | 8                     | ..... | .....                 | ..... |
| 20       | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                       |                  |       |                       |       |                       |       |
| 21       | 2 plants.....                               | 1913  | 5                    | 64.8                              | .359                            | 23.49                              | .....                                          | .....                 | 1                | ..... | 4                     | ..... | .....                 | ..... |
| 22       |                                             | 1914  | 3                    | 67.9                              | .281                            | 19.41                              | .....                                          | .....                 | 1                | ..... | 2                     | ..... | .....                 | ..... |
|          |                                             | 1915  | 3                    | 67.9                              | .273                            | 18.84                              | .....                                          | .....                 | 1                | ..... | 2                     | ..... | .....                 | ..... |
| 23       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                       |                  |       |                       |       |                       |       |
| 24       | 16 plants.....                              | 1913  | 66                   | 60.8                              | .311                            | 18.97                              | 3                                              | 24                    | 3                | ..... | 36                    | ..... | .....                 | ..... |
|          |                                             | 1914  | 64                   | 60.2                              | .257                            | 15.60                              | 3                                              | 27                    | 3                | ..... | 21                    | 10    | .....                 | ..... |
| 25       | 20 plants.....                              | 1914  | 72                   | 59.9                              | .258                            | 15.62                              | 3                                              | 31                    | 5                | ..... | 23                    | 10    | .....                 | ..... |
| 26       |                                             | 1915  | 63                   | 60.5                              | .293                            | 17.71                              | 12                                             | 13                    | 5                | ..... | 22                    | 11    | .....                 | ..... |
|          | Hook-ups, 13-inch, 14-inch, and 15-inch:    |       |                      |                                   |                                 |                                    |                                                |                       |                  |       |                       |       |                       |       |
|          | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                       |                  |       |                       |       |                       |       |
| 27       | 1 plant.....                                | 1913  | 12                   | 72.0                              | .232                            | 16.73                              | .....                                          | .....                 | .....            | ..... | 12                    | ..... | .....                 | ..... |
| 28       |                                             | 1914  | 12                   | 72.0                              | .274                            | 19.75                              | .....                                          | .....                 | .....            | ..... | 12                    | ..... | .....                 | ..... |
| 29       | 3 plants.....                               | 1914  | 15                   | 69.6                              | .276                            | 19.19                              | .....                                          | .....                 | 1                | ..... | 2                     | 12    | .....                 | ..... |
| 30       |                                             | 1915  | 16                   | 68.8                              | .257                            | 17.62                              | .....                                          | .....                 | 2                | ..... | 2                     | 12    | .....                 | ..... |
| 31       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                       |                  |       |                       |       |                       |       |
| 32       | 2 plants.....                               | 1913  | 14                   | 59.4                              | .306                            | 17.32                              | .....                                          | 6                     | .....            | ..... | 8                     | ..... | .....                 | ..... |
| 33       |                                             | 1914  | 14                   | 59.4                              | .258                            | 14.93                              | .....                                          | 6                     | .....            | ..... | 8                     | ..... | .....                 | ..... |
|          |                                             | 1915  | 14                   | 57.7                              | .260                            | 14.51                              | 6                                              | .....                 | .....            | ..... | 8                     | ..... | .....                 | ..... |
| 34       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                       |                  |       |                       |       |                       |       |
| 35       | 3 plants.....                               | 1913  | 17                   | 60.8                              | .249                            | 15.02                              | 3                                              | .....                 | 7                | ..... | 7                     | ..... | .....                 | ..... |
| 36       |                                             | 1914  | 18                   | 61.2                              | .267                            | 16.33                              | 3                                              | .....                 | 7                | ..... | 8                     | ..... | .....                 | ..... |
|          |                                             | 1915  | 18                   | 58.9                              | .296                            | 17.59                              | 3                                              | 7                     | .....            | ..... | 8                     | ..... | .....                 | ..... |
| 37       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                       |                  |       |                       |       |                       |       |
| 38       | 6 plants.....                               | 1913  | 43                   | 63.5                              | .263                            | 16.25                              | 3                                              | 6                     | .....            | 7     | 15                    | 12    | .....                 | ..... |
|          |                                             | 1914  | 44                   | 63.6                              | .266                            | 16.82                              | 3                                              | 6                     | .....            | 7     | 16                    | 12    | .....                 | ..... |
| 39       | 8 plants.....                               | 1914  | 47                   | 63.4                              | .267                            | 16.82                              | 3                                              | 6                     | 1                | 7     | 18                    | 12    | .....                 | ..... |
| 40       |                                             | 1915  | 48                   | 61.9                              | .273                            | 16.70                              | 9                                              | 7                     | 2                | ..... | 18                    | 12    | .....                 | ..... |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |   | Line<br>No. |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|---|-------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |   |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |   | 1           |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                | 1                                | 2                                | 8                                | 3                                | 3                                | 4                                | 2                                |                            |   | 2           |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 1                                | 1                                | 3                                | 8                                | 3                                | 2                                | 4                                |                                  |                            |   | 3           |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 3                                | 1                                | 3                                | 6                                | 2                                | 3                                | 4                                |                                  |                            |   |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |   |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 4                                | 3                                | 7                                | 18                               | 35                               | 60                               | 33                               | 15                               | 5                          | 2 | 4           |
|                                               |                                |                                |                                 |                                  | 2                                | 4                                | 8                                | 7                                | 15                               | 37                               | 57                               | 30                               | 9                                | 2                                | 2                          |   | 5           |
|                                               |                                |                                |                                 | 1                                | 3                                | 4                                | 6                                | 9                                | 23                               | 40                               | 70                               | 46                               | 14                               | 3                                | 4                          |   | 6           |
|                                               |                                |                                |                                 |                                  |                                  | 4                                | 5                                | 10                               | 21                               | 40                               | 72                               | 46                               | 15                               | 5                                | 4                          |   | 7           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |   |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                |                                  | 8                                | 4                                | 2                                |                                  |                                  |                                  |                            |   | 8           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 5                                | 5                                | 2                                | 3                                | 1                                |                                  |                                  |                            |   | 9           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |   |             |
|                                               |                                |                                |                                 |                                  |                                  | 1                                | 2                                | 7                                | 5                                | 4                                | 3                                | 1                                |                                  |                                  |                            |   | 10          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 4                                | 3                                | 2                                | 5                                |                                  |                                  |                                  |                            |   | 11          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |   |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                | 3                                | 11                               | 3                                | 14                               | 6                                |                                  |                                  |                            |   | 12          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 20                               | 4                                | 5                                |                                  |                                  |                                  |                            |   | 13          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                | 3                                | 20                               | 4                                | 7                                |                                  |                                  |                                  |                            |   | 14          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                | 10                               | 3                                | 10                               | 5                                |                                  |                                  |                            |   | 15          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |   |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                | 8                                |                                  |                                  |                            |   | 16          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 11                               |                                  |                                  |                                  |                            |   | 17          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                | 11                               |                                  |                                  |                                  |                            |   | 18          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 8                                | 4                                |                                  |                                  |                            |   | 19          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |   |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 1                                |                                  |                                  |                                  | 2                                | 2                                |                                  |                                  |                            |   | 20          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 1                                |                                  |                                  | 2                                |                                  |                                  |                                  |                            |   | 21          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 1                                |                                  |                                  | 2                                |                                  |                                  |                                  |                            |   | 22          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |   |             |
|                                               |                                |                                |                                 |                                  |                                  | 2                                | 1                                |                                  | 19                               | 7                                | 21                               | 16                               |                                  |                                  |                            |   | 23          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                | 3                                | 6                                | 25                               | 6                                | 21                               | 1                                |                                  |                                  |                            |   | 24          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |   |             |
|                                               |                                |                                |                                 |                                  |                                  | 2                                | 3                                | 8                                | 26                               | 9                                | 23                               | 1                                |                                  |                                  |                            |   | 25          |
|                                               |                                |                                |                                 |                                  |                                  | 1                                | 4                                | 5                                | 13                               | 6                                | 25                               | 9                                |                                  |                                  |                            |   | 26          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |   |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 8                                | 4                                |                                  |                                  |                                  |                                  |                            |   | 27          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 12                               |                                  |                                  |                                  |                                  |                                  |                            |   | 28          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |   |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 15                               | 6                                | 1                                |                                  |                                  |                                  |                            |   | 29          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 9                                |                                  |                                  |                                  |                                  |                                  |                            |   | 30          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |   |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 8                                |                                  | 1                                | 5                                |                                  |                                  |                            |   | 31          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 8                                | 2                                | 4                                |                                  |                                  |                                  |                            |   | 32          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 8                                |                                  | 6                                |                                  |                                  |                                  |                            |   | 33          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |   |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 7                                | 7                                | 3                                |                                  |                                  |                                  |                            |   | 34          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 6                                | 9                                | 3                                |                                  |                                  |                                  |                            |   | 35          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  | 7                                | 11                               |                                  |                                  |                                  |                            |   | 36          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |   |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 23                               | 11                               | 4                                | 5                                |                                  |                                  |                            |   | 37          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 14                               | 23                               | 7                                |                                  |                                  |                                  |                            |   | 38          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |   |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 14                               | 26                               | 7                                |                                  |                                  |                                  |                            |   | 39          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 17                               | 13                               | 18                               |                                  |                                  |                                  |                            |   | 40          |

TABLE P.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—

| Line No. | Occupation, district, and number of plants.     | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |  |
|----------|-------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|--|
|          |                                                 |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |  |
| 1        | Hook-ups, 16-inch: Eastern—<br>4 plants.....    | 1913  | 15                   | 60.1                              | \$0.256                         | \$15.81                            |                                                |                      | 1               | 6  |                      | 8  |                      |    |  |
| 2        |                                                 | 1914  | 15                   | 60.9                              | .283                            | 17.55                              |                                                |                      | 1               | 6  |                      | 8  |                      |    |  |
| 3        | 4 plants.....                                   | 1914  | 13                   | 62.8                              | .316                            | 20.00                              |                                                |                      | 1               | 1  |                      | 11 |                      |    |  |
| 4        |                                                 | 1915  | 14                   | 62.4                              | .275                            | 17.30                              |                                                |                      | 1               | 2  |                      | 11 |                      |    |  |
| 5        | Pittsburgh—<br>2 plants.....                    | 1913  | 14                   | 64.3                              | .370                            | 23.79                              |                                                |                      |                 |    |                      | 14 |                      |    |  |
| 6        |                                                 | 1914  | 12                   | 64.3                              | .229                            | 14.73                              |                                                |                      |                 |    |                      | 12 |                      |    |  |
| 7        | 4 plants.....                                   | 1914  | 21                   | 63.5                              | .223                            | 14.20                              |                                                |                      |                 | 3  |                      | 18 |                      |    |  |
| 8        |                                                 | 1915  | 20                   | 63.5                              | .227                            | 14.41                              |                                                |                      |                 | 3  |                      | 17 |                      |    |  |
| 9        | G. L. and M. W.—<br>3 plants.....               | 1913  | 19                   | 50.8                              | .323                            | 16.28                              | 9                                              | 8                    |                 |    |                      | 2  |                      |    |  |
| 10       |                                                 | 1914  | 19                   | 50.8                              | .333                            | 16.88                              | 9                                              | 8                    |                 |    |                      | 2  |                      |    |  |
| 11       | 7 plants.....                                   | 1914  | 36                   | 56.3                              | .311                            | 17.31                              | 9                                              | 11                   |                 |    |                      | 16 |                      |    |  |
| 12       |                                                 | 1915  | 30                   | 60.2                              | .255                            | 15.46                              | 3                                              | 7                    |                 |    |                      | 20 |                      |    |  |
| 13       | Southern—<br>4 plants.....                      | 1913  | 19                   | 54.4                              | .250                            | 13.94                              | 8                                              | 5                    |                 |    |                      | 6  |                      |    |  |
| 14       |                                                 | 1914  | 15                   | 56.6                              | .255                            | 14.35                              | 4                                              | 5                    |                 |    |                      | 6  |                      |    |  |
| 15       |                                                 | 1915  | 15                   | 56.6                              | .253                            | 14.24                              | 4                                              | 5                    |                 |    |                      | 6  |                      |    |  |
| 16       | Total—<br>13 plants.....                        | 1913  | 67                   | 56.9                              | .297                            | 17.08                              | 17                                             | 14                   | 6               |    |                      | 30 |                      |    |  |
| 17       |                                                 | 1914  | 61                   | 57.4                              | .281                            | 16.00                              | 13                                             | 14                   | 6               |    |                      | 28 |                      |    |  |
| 18       | 19 plants.....                                  | 1914  | 85                   | 59.1                              | .280                            | 16.43                              | 13                                             | 17                   | 4               |    |                      | 51 |                      |    |  |
| 19       |                                                 | 1915  | 79                   | 60.7                              | .251                            | 15.29                              | 7                                              | 13                   | 5               |    |                      | 54 |                      |    |  |
| 20       | Hook-ups, 18-inch: Eastern—<br>5 plants.....    | 1913  | 16                   | 56.2                              | .198                            | 11.08                              |                                                | 12                   |                 |    |                      | 4  |                      |    |  |
| 21       |                                                 | 1914  | 16                   | 56.3                              | .188                            | 10.41                              |                                                | 12                   |                 |    |                      | 4  |                      |    |  |
| 22       |                                                 | 1915  | 13                   | 56.7                              | .201                            | 11.21                              |                                                | 9                    |                 |    |                      | 4  |                      |    |  |
| 23       | Pittsburgh—<br>3 plants.....                    | 1913  | 17                   | 57.2                              | .339                            | 19.39                              |                                                | 5                    | 12              |    |                      |    |                      |    |  |
| 24       |                                                 | 1914  | 17                   | 57.2                              | .302                            | 17.34                              |                                                | 5                    | 12              |    |                      |    |                      |    |  |
| 25       | 3 plants.....                                   | 1914  | 20                   | 56.2                              | .295                            | 16.68                              |                                                | 8                    | 12              |    |                      |    |                      |    |  |
| 26       |                                                 | 1915  | 20                   | 55.4                              | .278                            | 15.48                              | 6                                              | 2                    | 12              |    |                      |    |                      |    |  |
| 27       | G. L. and M. W.—<br>2 plants.....               | 1913  | 14                   | 63.3                              | .319                            | 20.17                              |                                                |                      |                 |    |                      | 14 |                      |    |  |
| 28       |                                                 | 1914  | 14                   | 63.3                              | .306                            | 19.35                              |                                                |                      |                 |    |                      | 14 |                      |    |  |
| 29       | 3 plants.....                                   | 1914  | 18                   | 61.8                              | .306                            | 18.88                              |                                                |                      | 4               |    |                      | 14 |                      |    |  |
| 30       |                                                 | 1915  | 18                   | 62.4                              | .314                            | 19.59                              |                                                |                      | 4               |    |                      | 14 |                      |    |  |
| 31       | Southern—<br>2 plants.....                      | 1913  | 4                    | 55.0                              | .219                            | 11.96                              |                                                | 2                    | 2               |    |                      |    |                      |    |  |
| 32       |                                                 | 1914  | 4                    | 55.0                              | .220                            | 12.05                              |                                                | 2                    | 2               |    |                      |    |                      |    |  |
| 33       |                                                 | 1915  | 4                    | 55.0                              | .224                            | 12.22                              |                                                | 2                    | 2               |    |                      |    |                      |    |  |
| 34       | Total—<br>12 plants.....                        | 1913  | 51                   | 58.4                              | .280                            | 16.41                              |                                                | 19                   | 14              |    |                      | 18 |                      |    |  |
| 35       |                                                 | 1914  | 51                   | 58.4                              | .261                            | 15.30                              |                                                | 19                   | 14              |    |                      | 18 |                      |    |  |
| 36       | 13 plants.....                                  | 1914  | 58                   | 57.9                              | .264                            | 15.32                              |                                                | 22                   | 18              |    |                      | 18 |                      |    |  |
| 37       |                                                 | 1915  | 55                   | 57.9                              | .268                            | 15.58                              | 6                                              | 13                   | 18              |    |                      | 18 |                      |    |  |
| 38       | Hook-ups, all sizes: Eastern—<br>11 plants..... | 1913  | 59                   | 60.6                              | .228                            | 13.95                              |                                                |                      | 32              |    |                      | 15 | 12                   |    |  |
| 39       |                                                 | 1914  | 59                   | 60.6                              | .245                            | 15.03                              |                                                |                      | 32              |    |                      | 15 | 12                   |    |  |
| 40       | 14 plants.....                                  | 1914  | 64                   | 60.7                              | .252                            | 15.44                              |                                                |                      | 36              |    |                      | 28 |                      |    |  |
| 41       |                                                 | 1915  | 60                   | 61.2                              | .243                            | 14.93                              |                                                |                      | 30              |    |                      | 30 |                      |    |  |
| 42       | Pittsburgh—<br>9 plants.....                    | 1913  | 79                   | 60.5                              | .329                            | 19.58                              |                                                |                      | 31              |    |                      | 48 |                      |    |  |
| 43       |                                                 | 1914  | 77                   | 59.9                              | .249                            | 14.76                              |                                                |                      | 65              |    |                      | 12 |                      |    |  |
| 44       | 11 plants.....                                  | 1914  | 91                   | 59.9                              | .248                            | 14.73                              |                                                |                      | 34              |    |                      | 57 |                      |    |  |
| 45       |                                                 | 1915  | 84                   | 59.6                              | .269                            | 15.78                              |                                                | 20                   | 14              |    |                      | 50 |                      |    |  |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                | 1                                | 4                                |                                  | 8                                |                                  |                                  |                                  |                            | 1           |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 4                                |                                  | 2                                | 1                                | 8                                |                                  |                                  |                                  |                            | 2           |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 1                                |                                  |                                  | 4                                | 8                                |                                  |                                  |                                  |                            | 3           |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 1                                |                                  | 4                                | 1                                | 8                                |                                  |                                  |                                  |                            | 4           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 10                               | 4                                |                                  |                                  |                            | 5           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 3                                | 4                                | 5                                |                                  |                                  |                                  |                                  |                            | 6           |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 3                                | 3                                | 8                                | 7                                |                                  |                                  |                                  |                                  |                            | 7           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 16                               | 4                                |                                  |                                  |                                  |                                  |                            | 8           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                | 17                               |                                  |                                  |                                  |                            | 9           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 19                               |                                  |                                  |                                  |                            | 10          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                | 1                                | 4                                | 6                                | 26                               |                                  |                                  |                                  |                            | 11          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 13                               | 7                                | 7                                |                                  |                                  |                                  |                            | 12          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                |                                  | 2                                | 6                                | 5                                | 4                                |                                  |                                  |                                  |                            | 13          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                |                                  | 2                                | 2                                | 8                                |                                  | 1                                |                                  |                                  |                            | 14          |
|                                               |                                |                                |                                 |                                  | 1                                | 1                                |                                  | 2                                | 2                                | 8                                |                                  |                                  | 1                                |                                  |                            | 15          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                            |             |
|                                               |                                |                                |                                 |                                  |                                  | 2                                | 2                                | 3                                | 11                               | 6                                | 39                               | 4                                |                                  |                                  |                            | 16          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                | 4                                | 5                                | 8                                | 14                               | 27                               | 1                                |                                  |                                  |                            | 17          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                | 4                                | 5                                | 14                               | 25                               | 34                               | 1                                |                                  |                                  |                            | 18          |
|                                               |                                |                                |                                 |                                  | 1                                | 1                                | 3                                | 3                                | 35                               | 20                               | 15                               |                                  | 1                                |                                  |                            | 19          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                | 3                                | 2                                | 9                                |                                  |                                  |                                  |                                  |                                  |                            | 20          |
|                                               |                                |                                |                                 | 2                                | 2                                |                                  | 3                                | 3                                | 1                                | 2                                | 1                                |                                  |                                  |                                  |                            | 21          |
|                                               |                                |                                |                                 | 2                                |                                  | 2                                | 1                                | 4                                | 1                                | 1                                | 2                                |                                  |                                  |                                  |                            | 22          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                | 11                               | 2                                |                                  |                                  |                            | 23          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 6                                | 9                                |                                  | 2                                |                                  |                            | 24          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 3                                | 8                                | 9                                |                                  |                                  |                                  |                            | 25          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 4                                | 10                               | 6                                |                                  |                                  |                                  |                            | 26          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 6                                | 6                                |                                  |                                  |                                  |                            | 27          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 6                                | 6                                |                                  |                                  |                                  |                            | 28          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 9                                | 7                                |                                  |                                  |                                  |                            | 29          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 9                                | 1                                | 2                                | 6                                |                                  |                                  |                            | 30          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 1                                | 2                                | 1                                |                                  |                                  |                                  |                                  |                            | 31          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 1                                | 4                                |                                  |                                  |                                  |                                  |                                  |                            | 32          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                | 1                                |                                  |                                  |                                  |                                  |                            | 33          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                | 3                                | 3                                | 15                               | 9                                | 17                               | 2                                |                                  |                                  |                            | 34          |
|                                               |                                |                                |                                 | 2                                | 2                                |                                  | 3                                | 5                                | 9                                | 14                               | 16                               |                                  |                                  |                                  |                            | 35          |
|                                               |                                |                                |                                 | 2                                | 2                                |                                  | 3                                | 5                                | 10                               | 19                               | 17                               |                                  |                                  |                                  |                            | 36          |
|                                               |                                |                                |                                 | 2                                |                                  | 2                                | 1                                | 5                                | 16                               | 13                               | 10                               | 6                                |                                  |                                  |                            | 37          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 4                                | 5                                |                                  | 8                                | 10                               |                                  |                                  |                                  |                            | 38          |
|                                               |                                |                                |                                 | 2                                | 2                                |                                  | 5                                | 10                               | 29                               | 17                               | 12                               | 1                                |                                  |                                  |                            | 39          |
|                                               |                                |                                |                                 | 2                                | 2                                |                                  | 4                                | 12                               | 6                                | 25                               | 12                               | 1                                |                                  |                                  |                            | 40          |
|                                               |                                |                                |                                 | 2                                |                                  | 3                                | 4                                | 8                                | 17                               | 10                               | 16                               |                                  |                                  |                                  |                            | 41          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                | 3                                | 21                               | 5                                | 36                               | 17                               |                                  |                                  |                            | 42          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 3                                | 34                               | 17                               | 18                               |                                  |                                  |                                  |                            | 43          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                | 6                                | 3                                | 39                               | 21                               | 20                               |                                  |                                  |                                  |                            | 44          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                |                                  | 38                               | 17                               | 22                               | 5                                |                                  |                                  |                            | 45          |

TABLE P.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                       |                  |     |                       |     |                       |     |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|-----------------------|------------------|-----|-----------------------|-----|-----------------------|-----|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56. | 56 and under 60. | 60. | Over 60 and under 72. | 72. | Over 72 and under 84. | 84. |
| 1        | Hook-ups, all sizes—                        |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 2        | Concluded.                                  |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
|          | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
|          | 8 plants.....                               | 1913  | 61                   | 59.0                              | \$0.314                         | \$18.56                            |                                                | 19                    |                  |     | 42                    |     |                       |     |
|          |                                             | 1914  | 62                   | 59.2                              | .313                            | 18.55                              |                                                | 19                    |                  |     | 43                    |     |                       |     |
| 3        | 14 plants.....                              | 1914  | 85                   | 59.6                              | .306                            | 18.23                              |                                                |                       | 36               |     | 49                    |     |                       |     |
| 4        |                                             | 1915  | 79                   | 60.9                              | .296                            | 18.25                              |                                                |                       | 18               |     | 61                    |     |                       |     |
|          | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 5        | 8 plants.....                               | 1913  | 28                   | 56.3                              | .265                            | 15.36                              |                                                | 23                    |                  |     | 5                     |     |                       |     |
| 6        |                                             | 1914  | 22                   | 57.8                              | .252                            | 14.62                              |                                                | 4                     | 15               |     | 3                     |     |                       |     |
| 7        |                                             | 1915  | 22                   | 57.8                              | .250                            | 14.50                              |                                                | 4                     | 15               |     | 3                     |     |                       |     |
|          | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 8        | 36 plants.....                              | 1913  | 227                  | 59.6                              | .291                            | 17.32                              |                                                | 42                    | 63               |     | 110                   | 12  |                       |     |
| 9        |                                             | 1914  | 220                  | 59.7                              | .266                            | 15.89                              |                                                | 23                    | 112              |     | 73                    | 12  |                       |     |
| 10       | 47 plants.....                              | 1914  | 262                  | 59.8                              | .268                            | 16.03                              |                                                | 4                     | 121              |     | 137                   |     |                       |     |
| 11       |                                             | 1915  | 245                  | 60.3                              | .270                            | 16.25                              |                                                | 24                    | 77               |     | 144                   |     |                       |     |
|          | Roll bands, other, 8-inch:                  |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
|          | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 12       | 2 plants.....                               | 1913  | 4                    | 51.4                              | .253                            | 13.15                              |                                                | 4                     |                  |     |                       |     |                       |     |
| 13       |                                             | 1914  | 4                    | 51.4                              | .210                            | 12.48                              |                                                | 4                     |                  |     |                       |     |                       |     |
| 14       | 5 plants.....                               | 1914  | 9                    | 55.2                              | .209                            | 11.49                              |                                                | 7                     |                  |     | 2                     |     |                       |     |
| 15       |                                             | 1915  | 9                    | 55.3                              | .220                            | 12.13                              |                                                | 7                     |                  |     | 2                     |     |                       |     |
|          | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 16       | 6 plants.....                               | 1913  | 25                   | 60.2                              | .328                            | 19.77                              |                                                | 8                     | 6                | 1   | 10                    |     |                       |     |
| 17       |                                             | 1914  | 27                   | 62.8                              | .275                            | 17.17                              |                                                | 6                     | 2                | 3   | 16                    |     |                       |     |
| 18       | 7 plants.....                               | 1914  | 29                   | 63.0                              | .269                            | 16.83                              |                                                | 6                     | 2                | 3   | 18                    |     |                       |     |
| 19       |                                             | 1915  | 29                   | 62.3                              | .299                            | 18.47                              | 6                                              |                       | 2                | 3   | 14                    | 4   |                       |     |
|          | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 20       | 1 plant.....                                | 1913  | 4                    | 69.0                              | .183                            | 12.63                              |                                                |                       |                  |     | 4                     |     |                       |     |
| 21       |                                             | 1914  | 4                    | 69.0                              | .183                            | 12.63                              |                                                |                       |                  |     | 4                     |     |                       |     |
| 22       | 4 plants.....                               | 1914  | 10                   | 62.2                              | .243                            | 14.97                              |                                                | 4                     |                  |     | 6                     |     |                       |     |
| 23       |                                             | 1915  | 9                    | 64.8                              | .214                            | 13.84                              |                                                | 1                     |                  |     | 8                     |     |                       |     |
|          | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 24       | 1 plant.....                                | 1913  | 4                    | 65.0                              | .268                            | 17.42                              |                                                |                       |                  |     | 4                     |     |                       |     |
| 25       |                                             | 1914  | 4                    | 65.0                              | .222                            | 14.43                              |                                                |                       |                  |     | 4                     |     |                       |     |
| 26       |                                             | 1915  | 4                    | 65.0                              | .174                            | 11.31                              |                                                |                       |                  |     | 4                     |     |                       |     |
|          | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 27       | 10 plants.....                              | 1913  | 37                   | 60.7                              | .298                            | 18.03                              |                                                | 12                    | 6                | 1   | 18                    |     |                       |     |
| 28       |                                             | 1914  | 39                   | 62.5                              | .257                            | 15.94                              |                                                | 10                    | 2                | 3   | 24                    |     |                       |     |
| 29       | 17 plants.....                              | 1914  | 52                   | 61.7                              | .250                            | 15.36                              |                                                | 17                    | 2                | 3   | 30                    |     |                       |     |
| 30       |                                             | 1915  | 51                   | 61.7                              | .260                            | 15.97                              | 6                                              | 8                     | 2                | 3   | 28                    | 4   |                       |     |
|          | Roll bands, other, 9-inch:                  |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
|          | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 31       | 2 plants.....                               | 1913  | 4                    | 57.7                              | .217                            | 12.62                              |                                                | 2                     |                  |     | 2                     |     |                       |     |
| 32       |                                             | 1914  | 4                    | 57.8                              | .177                            | 10.12                              |                                                | 2                     |                  |     | 2                     |     |                       |     |
| 33       |                                             | 1915  | 4                    | 57.8                              | .167                            | 9.44                               |                                                | 2                     |                  |     | 2                     |     |                       |     |
|          | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 34       | 2 plants.....                               | 1913  | 10                   | 54.2                              | .338                            | 18.32                              |                                                | 7                     | 2                |     | 1                     |     |                       |     |
| 35       |                                             | 1914  | 10                   | 54.2                              | .353                            | 19.19                              |                                                | 7                     | 2                |     | 1                     |     |                       |     |
| 36       |                                             | 1915  | 10                   | 52.2                              | .345                            | 18.41                              | 6                                              | 1                     | 2                |     | 1                     |     |                       |     |
|          | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 37       | 3 plants.....                               | 1913  | 12                   | 65.6                              | .247                            | 15.84                              |                                                | 2                     |                  |     | 10                    |     |                       |     |
| 38       |                                             | 1914  | 12                   | 65.6                              | .247                            | 15.84                              |                                                | 2                     |                  |     | 10                    |     |                       |     |
| 39       | 4 plants.....                               | 1914  | 14                   | 65.4                              | .249                            | 15.94                              |                                                | 2                     |                  |     | 12                    |     |                       |     |
| 40       |                                             | 1915  | 14                   | 65.4                              | .249                            | 15.94                              |                                                | 2                     |                  |     | 12                    |     |                       |     |
|          | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 41       | 1 plant.....                                | 1913  | 8                    | 57.5                              | .151                            | 8.68                               |                                                |                       | 8                |     |                       |     |                       |     |
| 42       |                                             | 1914  | 8                    | 57.5                              | .162                            | 9.29                               |                                                |                       | 8                |     |                       |     |                       |     |
| 43       |                                             | 1915  | 8                    | 57.5                              | .153                            | 8.78                               |                                                |                       | 8                |     |                       |     |                       |     |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    | Line No. |
|-----------------------------------------------|--------------------|--------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-------------------|----|----------|
| 6 and under 7 cts.                            | 7 and under 8 cts. | 8 and under 9 cts. | 9 and under 10 cts. | 10 and under 12 cts. | 12 and under 14 cts. | 14 and under 16 cts. | 16 and under 18 cts. | 18 and under 20 cts. | 20 and under 25 cts. | 25 and under 30 cts. | 30 and under 40 cts. | 40 and under 50 cts. | 50 and under 60 cts. | 60 and under 70 cts. | 70 cts. and over. |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 10                   | 14                   | 29                   | 8                    |                      |                      |                   | 1  |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 8                    | 15                   | 39                   |                      |                      |                      |                   | 2  |          |
|                                               |                    |                    |                     |                      |                      |                      | 2                    | 1                    | 13                   | 25                   | 47                   |                      |                      |                      |                   | 3  |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 22                   | 16                   | 28                   | 10                   |                      |                      |                   | 4  |          |
|                                               |                    |                    |                     |                      |                      | 2                    | 1                    | 3                    | 8                    | 6                    | 6                    | 2                    |                      |                      |                   | 5  |          |
|                                               |                    |                    |                     |                      | 1                    | 2                    |                      | 3                    | 6                    | 8                    | 2                    | 1                    |                      |                      |                   | 6  |          |
|                                               |                    |                    |                     |                      |                      | 1                    |                      | 4                    | 4                    | 9                    | 2                    |                      |                      | 1                    |                   | 7  |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     | 2                    | 2                    | 6                    | 6                    | 6                    | 68                   | 33                   | 81                   | 27                   |                      |                      |                   | 8  |          |
|                                               |                    |                    |                     |                      |                      | 4                    | 10                   | 16                   | 56                   | 57                   | 71                   | 2                    |                      |                      |                   | 9  |          |
|                                               |                    |                    |                     | 2                    | 2                    | 4                    | 10                   | 18                   | 64                   | 79                   | 81                   | 2                    |                      |                      |                   | 10 |          |
|                                               |                    |                    |                     | 2                    | 1                    | 4                    | 8                    | 13                   | 81                   | 52                   | 68                   | 15                   | 1                    |                      |                   | 11 |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      | 2                    |                      |                      | 2                    |                      |                      |                      |                   | 12 |          |
|                                               |                    |                    |                     |                      |                      |                      |                      | 2                    |                      | 1                    | 1                    |                      |                      |                      |                   | 13 |          |
|                                               |                    |                    |                     |                      |                      | 3                    | 1                    | 2                    |                      | 1                    | 2                    |                      |                      |                      |                   | 14 |          |
|                                               |                    |                    |                     |                      |                      |                      |                      | 4                    | 1                    | 1                    | 1                    |                      |                      |                      |                   | 15 |          |
|                                               |                    |                    |                     | 1                    | 3                    |                      |                      |                      | 1                    | 4                    | 10                   | 5                    | 1                    |                      |                   | 16 |          |
|                                               |                    |                    |                     | 3                    | 1                    | 2                    |                      |                      | 2                    | 3                    | 16                   |                      |                      |                      |                   | 17 |          |
|                                               |                    |                    |                     |                      | 1                    | 2                    |                      | 2                    | 2                    | 3                    | 16                   |                      |                      |                      |                   | 18 |          |
|                                               |                    |                    |                     | 3                    | 5                    | 1                    |                      | 2                    | 2                    | 3                    | 12                   | 3                    | 1                    |                      |                   | 19 |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      | 4                    |                      |                      |                      |                      |                      |                      |                   | 20 |          |
|                                               |                    |                    |                     |                      |                      |                      |                      | 4                    |                      |                      |                      |                      |                      |                      |                   | 21 |          |
|                                               |                    |                    |                     |                      |                      |                      |                      | 6                    |                      |                      | 2                    |                      |                      |                      |                   | 22 |          |
|                                               |                    |                    |                     |                      |                      |                      |                      | 5                    | 2                    | 2                    |                      |                      |                      |                      |                   | 23 |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 4                    |                      |                      |                      |                      |                   | 24 |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 4                    |                      |                      |                      |                      |                      |                   | 25 |          |
|                                               |                    |                    |                     |                      |                      |                      | 4                    |                      |                      |                      |                      |                      |                      |                      |                   | 26 |          |
|                                               |                    |                    |                     |                      | 1                    | 3                    |                      | 6                    | 1                    | 8                    | 12                   | 5                    | 1                    |                      |                   | 27 |          |
|                                               |                    |                    |                     |                      | 3                    | 1                    | 2                    | 6                    | 6                    | 4                    | 17                   |                      |                      |                      |                   | 28 |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      | 3                    | 1                    | 5                    | 10                   | 6                    | 6                    | 20                   |                      |                      |                      |                   | 29 |          |
|                                               |                    |                    |                     |                      | 5                    | 1                    | 6                    | 11                   | 5                    | 6                    | 13                   | 3                    | 1                    |                      |                   | 30 |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |    |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | </ |          |

TABLE P.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—

| Line No. | Occupation, district, and number of plants.                                   | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |       |                      |       |                      |       |
|----------|-------------------------------------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-------|----------------------|-------|----------------------|-------|
|          |                                                                               |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60    | Over 60 and under 72 | 72    | Over 72 and under 84 | 84    |
| 1        | Roll hands, other, 9-inch—Concluded.<br>Total—<br>8 plants.....               | 1913  | 34                   | 59.4                              | \$0.248                         | \$14.51                            | .....                                          | 11                   | 10              | ..... | 13                   | ..... | .....                | ..... |
|          |                                                                               | 1914  | 34                   | 59.4                              | .250                            | 14.61                              | .....                                          | 11                   | 10              | ..... | 13                   | ..... | .....                | ..... |
| 3        | 9 plants.....                                                                 | 1914  | 36                   | 59.7                              | .250                            | 14.72                              | .....                                          | 11                   | 10              | ..... | 15                   | ..... | .....                | ..... |
|          |                                                                               | 1915  | 36                   | 59.1                              | .245                            | 14.31                              | 6                                              | 5                    | 10              | ..... | 15                   | ..... | .....                | ..... |
| 5        | Roll hands, other, 10-inch:<br>Eastern—<br>2 plants.....                      | 1913  | 7                    | 52.7                              | .193                            | 10.19                              | .....                                          | 4                    | 3               | ..... | .....                | ..... | .....                | ..... |
|          |                                                                               | 1914  | 7                    | 52.7                              | .197                            | 10.43                              | .....                                          | 4                    | 3               | ..... | .....                | ..... | .....                | ..... |
| 7        | 2 plants.....                                                                 | 1914  | 6                    | 53.9                              | .212                            | 11.65                              | .....                                          | 4                    | .....           | ..... | 2                    | ..... | .....                | ..... |
|          |                                                                               | 1915  | 6                    | 53.9                              | .198                            | 10.89                              | .....                                          | 4                    | .....           | ..... | 2                    | ..... | .....                | ..... |
| 9        | Pittsburgh—<br>4 plants.....                                                  | 1913  | 23                   | 67.7                              | .433                            | 29.27                              | .....                                          | 1                    | 2               | 2     | 18                   | ..... | .....                | ..... |
|          |                                                                               | 1914  | 23                   | 67.7                              | .425                            | 28.62                              | .....                                          | 1                    | 2               | 2     | 18                   | ..... | .....                | ..... |
| 11       | 7 plants.....                                                                 | 1914  | 34                   | 64.0                              | .402                            | 25.83                              | .....                                          | 8                    | 2               | 2     | 22                   | ..... | .....                | ..... |
|          |                                                                               | 1915  | 34                   | 62.5                              | .379                            | 23.79                              | 6                                              | 2                    | 2               | 2     | 16                   | 6     | .....                | ..... |
| 13       | G. L. and M. W.—<br>3 plants.....                                             | 1914  | 8                    | 65.4                              | .398                            | 26.25                              | .....                                          | .....                | 2               | 1     | 5                    | ..... | .....                | ..... |
|          |                                                                               | 1915  | 9                    | 62.9                              | .431                            | 27.36                              | .....                                          | .....                | 4               | 1     | 4                    | ..... | .....                | ..... |
| 15       | Total—<br>6 plants.....                                                       | 1913  | 30                   | 64.2                              | .377                            | 24.81                              | .....                                          | 5                    | 5               | 2     | 18                   | ..... | .....                | ..... |
|          |                                                                               | 1914  | 30                   | 64.2                              | .372                            | 24.38                              | .....                                          | 5                    | 5               | 2     | 18                   | ..... | .....                | ..... |
| 17       | 12 plants.....                                                                | 1914  | 48                   | 63.0                              | .378                            | 24.13                              | .....                                          | 12                   | 4               | 3     | 29                   | ..... | .....                | ..... |
|          |                                                                               | 1915  | 49                   | 61.5                              | .367                            | 22.87                              | 6                                              | 6                    | 6               | 3     | 22                   | 6     | .....                | ..... |
| 19       | Roll hands, other, 12-inch:<br>Eastern—<br>2 plants.....                      | 1913  | 6                    | 61.3                              | .240                            | 14.71                              | .....                                          | 2                    | .....           | ..... | 4                    | ..... | .....                | ..... |
|          |                                                                               | 1914  | 6                    | 61.3                              | .243                            | 14.86                              | .....                                          | 2                    | .....           | ..... | 4                    | ..... | .....                | ..... |
| 21       | 3 plants.....                                                                 | 1915  | 3                    | 61.3                              | .207                            | 12.54                              | .....                                          | 1                    | .....           | ..... | 2                    | ..... | .....                | ..... |
|          |                                                                               | ..... | .....                | .....                             | .....                           | .....                              | .....                                          | .....                | .....           | ..... | .....                | ..... | .....                | ..... |
| 22       | Pittsburgh—<br>5 plants.....                                                  | 1913  | 32                   | 68.9                              | .329                            | 22.33                              | .....                                          | 3                    | .....           | ..... | 5                    | 24    | .....                | ..... |
|          |                                                                               | 1914  | 31                   | 69.1                              | .259                            | 17.84                              | .....                                          | 3                    | .....           | ..... | 4                    | 24    | .....                | ..... |
| 23       | G. L. and M. W.—<br>2 plants.....                                             | 1915  | 29                   | 67.9                              | .292                            | 19.48                              | 3                                              | .....                | .....           | ..... | 6                    | 20    | .....                | ..... |
|          |                                                                               | ..... | .....                | .....                             | .....                           | .....                              | .....                                          | .....                | .....           | ..... | .....                | ..... | .....                | ..... |
| 25       | 3 plants.....                                                                 | 1913  | 18                   | 71.7                              | .338                            | 24.26                              | .....                                          | .....                | .....           | ..... | 2                    | 16    | .....                | ..... |
|          |                                                                               | 1914  | 18                   | 71.7                              | .312                            | 22.40                              | .....                                          | .....                | .....           | ..... | 2                    | 16    | .....                | ..... |
| 27       | Southern—<br>1 plant.....                                                     | 1914  | 20                   | 70.1                              | .301                            | 21.46                              | .....                                          | .....                | .....           | ..... | 4                    | 16    | .....                | ..... |
|          |                                                                               | 1915  | 20                   | 71.1                              | .320                            | 22.81                              | .....                                          | .....                | .....           | ..... | 4                    | 16    | .....                | ..... |
| 29       | Total—<br>10 plants.....                                                      | 1913  | 1                    | 59.8                              | .283                            | 16.91                              | .....                                          | .....                | 1               | ..... | .....                | ..... | .....                | ..... |
|          |                                                                               | 1914  | 1                    | 59.8                              | .282                            | 16.85                              | .....                                          | .....                | 1               | ..... | .....                | ..... | .....                | ..... |
| 31       | 1 plant.....                                                                  | 1915  | 1                    | 59.8                              | .271                            | 16.19                              | .....                                          | .....                | 1               | ..... | .....                | ..... | .....                | ..... |
|          |                                                                               | ..... | .....                | .....                             | .....                           | .....                              | .....                                          | .....                | .....           | ..... | .....                | ..... | .....                | ..... |
| 32       | Total—<br>11 plants.....                                                      | 1913  | 57                   | 68.8                              | .321                            | 22.04                              | .....                                          | 5                    | 1               | ..... | 11                   | 40    | .....                | ..... |
|          |                                                                               | 1914  | 56                   | 68.9                              | .275                            | 18.97                              | .....                                          | 5                    | 1               | ..... | 10                   | 40    | .....                | ..... |
| 34       | 11 plants.....                                                                | 1914  | 58                   | 68.8                              | .272                            | 18.76                              | .....                                          | 5                    | 1               | ..... | 12                   | 40    | .....                | ..... |
|          |                                                                               | 1915  | 53                   | 68.6                              | .297                            | 20.28                              | 3                                              | 1                    | 1               | ..... | 12                   | 36    | .....                | ..... |
| 36       | Roll hands, other, 13-inch, 14-inch, and 15-inch:<br>Eastern—<br>1 plant..... | 1914  | 2                    | 61.0                              | .286                            | 17.42                              | .....                                          | .....                | .....           | ..... | 2                    | ..... | .....                | ..... |
|          |                                                                               | 1915  | 2                    | 61.0                              | .262                            | 15.98                              | .....                                          | .....                | .....           | ..... | 2                    | ..... | .....                | ..... |
| 38       | Pittsburgh—<br>2 plants.....                                                  | 1913  | 9                    | 60.9                              | .298                            | 17.51                              | .....                                          | 3                    | .....           | ..... | 6                    | ..... | .....                | ..... |
|          |                                                                               | 1914  | 9                    | 60.9                              | .251                            | 14.97                              | .....                                          | 3                    | .....           | ..... | 6                    | ..... | .....                | ..... |
| 40       | 2 plants.....                                                                 | 1915  | 9                    | 59.3                              | .260                            | 15.15                              | 3                                              | .....                | .....           | ..... | 6                    | ..... | .....                | ..... |
|          |                                                                               | ..... | .....                | .....                             | .....                           | .....                              | .....                                          | .....                | .....           | ..... | .....                | ..... | .....                | ..... |



AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | Line No. |
|-----------------------------------------------|--------------------|--------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-------------------|----------|
| 6 and under 7 cts.                            | 7 and under 8 cts. | 8 and under 9 cts. | 9 and under 10 cts. | 10 and under 12 cts. | 12 and under 14 cts. | 14 and under 16 cts. | 16 and under 18 cts. | 18 and under 20 cts. | 20 and under 25 cts. | 25 and under 30 cts. | 30 and under 40 cts. | 40 and under 50 cts. | 50 and under 60 cts. | 60 and under 70 cts. | 70 cts. and over. |          |
|                                               |                    |                    |                     |                      | 4                    | 2                    | 4                    | 8                    | 4                    | 3                    | 5                    | 2                    | 2                    |                      |                   | 1        |
|                                               |                    |                    |                     |                      |                      | 6                    | 3                    | 11                   | 3                    |                      | 7                    | 2                    | 2                    |                      |                   | 2        |
|                                               |                    |                    |                     |                      |                      |                      | 6                    | 11                   | 3                    | 2                    | 7                    | 2                    | 2                    |                      |                   | 3        |
|                                               |                    |                    |                     | 1                    | 1                    | 6                    | 2                    | 8                    | 7                    | 3                    | 6                    |                      |                      | 2                    |                   | 4        |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      |                      | 2                    | 4                    |                      | 1                    |                      |                      |                      |                      |                   | 5        |
|                                               |                    |                    |                     |                      |                      |                      | 2                    | 4                    |                      | 1                    |                      |                      |                      |                      |                   | 6        |
|                                               |                    |                    |                     |                      |                      |                      |                      | 4                    | 1                    | 1                    |                      |                      |                      |                      |                   | 7        |
|                                               |                    |                    |                     |                      |                      |                      | 4                    |                      | 1                    | 1                    |                      |                      |                      |                      |                   | 8        |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 2                    |                      | 12                   | 3                    | 2                    | 1                    | 3                 | 9        |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 4                    | 13                   |                      | 3                    | 1                    | 2                 | 10       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 1                    | 4                    | 23                   |                      | 3                    | 1                    | 2                 | 11       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 2                    | 6                    | 15                   | 6                    | 3                    |                      | 2                 | 12       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 2                    | 2                    | 2                    | 2                    |                      |                   | 13       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      | 4                    | 2                    | 3                    |                      |                   | 14       |
|                                               |                    |                    |                     |                      |                      |                      | 2                    | 4                    | 2                    | 1                    | 12                   | 3                    | 2                    | 1                    | 3                 | 15       |
|                                               |                    |                    |                     |                      |                      |                      | 2                    | 4                    |                      | 5                    | 13                   |                      | 3                    | 1                    | 2                 | 16       |
|                                               |                    |                    |                     |                      |                      |                      |                      | 4                    | 2                    | 7                    | 25                   | 2                    | 5                    | 1                    | 2                 | 17       |
|                                               |                    |                    |                     |                      |                      |                      | 4                    |                      | 3                    | 7                    | 19                   | 8                    | 6                    |                      | 2                 | 18       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 2                    | 4                    |                      |                      |                      |                      |                   | 19       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 4                    | 2                    |                      |                      |                      |                      |                   | 20       |
|                                               |                    |                    |                     |                      |                      |                      |                      | 2                    | 1                    |                      |                      |                      |                      |                      |                   | 21       |
|                                               |                    |                    |                     |                      |                      |                      |                      | 2                    |                      | 14                   | 13                   |                      | 3                    |                      |                   | 22       |
|                                               |                    |                    |                     |                      |                      |                      |                      | 2                    | 13                   | 14                   | 2                    |                      |                      |                      |                   | 23       |
|                                               |                    |                    |                     |                      |                      |                      |                      | 4                    |                      | 21                   | 1                    | 2                    | 1                    |                      |                   | 24       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 2                    |                      | 14                   |                      |                      | 2                    |                   | 25       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 2                    | 14                   |                      |                      | 2                    |                      |                   | 26       |
|                                               |                    |                    |                     |                      |                      |                      |                      | 1                    | 3                    | 14                   |                      |                      | 2                    |                      |                   | 27       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 3                    | 1                    | 14                   |                      | 2                    |                      |                   | 28       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | 29       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 1                    |                      |                      |                      |                      |                   | 30       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 1                    |                      |                      |                      |                      |                   | 31       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 2                    | 4                    | 19                   | 27                   | 3                    | 2                    |                   | 32       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      | 2                    | 19                   | 31                   | 2                    |                      |                      |                   | 33       |
|                                               |                    |                    |                     |                      |                      |                      |                      | 3                    | 20                   | 31                   | 2                    |                      | 2                    |                      |                   | 34       |
|                                               |                    |                    |                     |                      |                      |                      |                      | 6                    | 3                    | 24                   | 15                   | 2                    | 3                    |                      |                   | 35       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 2                    |                      |                      |                      |                      |                   | 36       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      | 2                    |                      |                      |                      |                      |                   | 37       |
|                                               |                    |                    |                     |                      |                      |                      |                      | 4                    |                      |                      | 3                    | 2                    |                      |                      |                   | 38       |
|                                               |                    |                    |                     |                      |                      |                      |                      | 4                    |                      | 4                    | 1                    |                      |                      |                      |                   | 39       |
|                                               |                    |                    |                     |                      |                      |                      |                      | 4                    |                      |                      | 5                    |                      |                      |                      |                   | 40       |

TABLE P.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, 1913 TO 1915—

| Line No. | Occupation, district, and number of plants.                 | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                       |                  |    |                       |    |                       |
|----------|-------------------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|-----------------------|------------------|----|-----------------------|----|-----------------------|
|          |                                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56. | 56 and under 60. | 60 | Over 60 and under 72. | 72 | Over 72 and under 84. |
|          | Roll hands, other, 13-inch, 14 inch, and 15-inch—Concluded. |       |                      |                                   |                                 |                                    |                                                |                       |                  |    |                       |    |                       |
| 1        | Total—                                                      |       |                      |                                   |                                 |                                    |                                                |                       |                  |    |                       |    |                       |
| 2        | 2 plants.....                                               | 1913  | 9                    | 60.9                              | \$0.298                         | \$17.51                            |                                                | 3                     |                  |    | 6                     |    |                       |
|          |                                                             | 1914  | 9                    | 60.9                              | .251                            | 14.97                              |                                                | 3                     |                  |    | 6                     |    |                       |
| 3        | 3 plants.....                                               | 1914  | 11                   | 60.9                              | .257                            | 15.42                              |                                                | 3                     |                  |    | 8                     |    |                       |
| 4        |                                                             | 1915  | 11                   | 59.6                              | .261                            | 15.30                              | 3                                              |                       |                  |    | 8                     |    |                       |
|          | Roll hands, other, 16-inch:                                 |       |                      |                                   |                                 |                                    |                                                |                       |                  |    |                       |    |                       |
| 5        | Pittsburgh—                                                 |       |                      |                                   |                                 |                                    |                                                |                       |                  |    |                       |    |                       |
| 6        | 2 plants.....                                               | 1913  | 14                   | 64.4                              | .358                            | 23.08                              |                                                |                       |                  | 1  | 13                    |    |                       |
|          |                                                             | 1914  | 13                   | 64.5                              | .242                            | 15.58                              |                                                |                       |                  | 1  | 12                    |    |                       |
| 7        | 3 plants.....                                               | 1914  | 14                   | 64.5                              | .246                            | 15.85                              |                                                |                       |                  | 1  | 13                    |    |                       |
| 8        |                                                             | 1915  | 14                   | 64.5                              | .249                            | 15.84                              |                                                |                       |                  | 1  | 13                    |    |                       |
| 9        | G. L. and M. W.—                                            |       |                      |                                   |                                 |                                    |                                                |                       |                  |    |                       |    |                       |
| 10       | 1 plant.....                                                | 1914  | 3                    | 68.0                              | .292                            | 23.11                              |                                                |                       |                  |    | 2                     |    |                       |
|          |                                                             | 1915  | 3                    | 68.0                              | .294                            | 20.22                              |                                                |                       |                  |    | 2                     | 1  |                       |
| 11       | Southern—                                                   |       |                      |                                   |                                 |                                    |                                                |                       |                  |    |                       |    |                       |
| 12       | 1 plant.....                                                | 1913  | 2                    | 65.0                              | .230                            | 14.95                              |                                                |                       |                  |    | 2                     |    |                       |
|          |                                                             | 1914  | 2                    | 65.0                              | .172                            | 11.18                              |                                                |                       |                  |    | 2                     |    |                       |
| 13       |                                                             | 1915  | 2                    | 65.0                              | .181                            | 11.77                              |                                                |                       |                  |    | 2                     |    |                       |
|          | Total—                                                      |       |                      |                                   |                                 |                                    |                                                |                       |                  |    |                       |    |                       |
| 14       | 3 plants.....                                               | 1913  | 16                   | 64.5                              | .342                            | 22.06                              |                                                |                       |                  | 1  | 15                    |    |                       |
| 15       |                                                             | 1914  | 15                   | 64.5                              | .232                            | 15.00                              |                                                |                       |                  | 1  | 14                    |    |                       |
| 16       | 5 plants.....                                               | 1914  | 19                   | 65.1                              | .245                            | 16.03                              |                                                |                       |                  | 1  | 17                    | 1  |                       |
| 17       |                                                             | 1915  | 19                   | 65.1                              | .246                            | 16.10                              |                                                |                       |                  | 1  | 17                    | 1  |                       |
|          | Roll hands, other, 18-inch:                                 |       |                      |                                   |                                 |                                    |                                                |                       |                  |    |                       |    |                       |
| 18       | Eastern—                                                    |       |                      |                                   |                                 |                                    |                                                |                       |                  |    |                       |    |                       |
| 19       | 3 plants.....                                               | 1913  | 6                    | 57.3                              | .228                            | 12.95                              |                                                | 4                     |                  |    | 2                     |    |                       |
|          |                                                             | 1914  | 5                    | 58.0                              | .202                            | 11.45                              |                                                | 3                     |                  |    | 2                     |    |                       |
| 20       |                                                             | 1915  | 5                    | 58.0                              | .221                            | 12.59                              |                                                | 3                     |                  |    | 2                     |    |                       |
| 21       | Pittsburgh—                                                 |       |                      |                                   |                                 |                                    |                                                |                       |                  |    |                       |    |                       |
| 22       | 2 plants.....                                               | 1913  | 8                    | 52.9                              | .443                            | 23.70                              |                                                | 6                     | 2                |    |                       |    |                       |
|          |                                                             | 1914  | 8                    | 52.9                              | .353                            | 19.04                              |                                                | 6                     | 2                |    |                       |    |                       |
| 23       |                                                             | 1915  | 8                    | 50.9                              | .345                            | 17.92                              | 6                                              |                       | 2                |    |                       |    |                       |
| 24       | G. L. and M. W.—                                            |       |                      |                                   |                                 |                                    |                                                |                       |                  |    |                       |    |                       |
| 25       | 1 plant.....                                                | 1913  | 2                    | 62.8                              | .365                            | 22.90                              |                                                |                       |                  |    | 2                     |    |                       |
|          |                                                             | 1914  | 2                    | 62.8                              | .373                            | 23.41                              |                                                |                       |                  |    | 2                     |    |                       |
| 26       | 2 plants.....                                               | 1914  | 3                    | 60.7                              | .385                            | 23.32                              |                                                |                       | 1                |    | 2                     |    |                       |
| 27       |                                                             | 1915  | 3                    | 61.5                              | .422                            | 25.93                              |                                                |                       | 1                |    | 2                     |    |                       |
|          | Total—                                                      |       |                      |                                   |                                 |                                    |                                                |                       |                  |    |                       |    |                       |
| 28       | 6 plants.....                                               | 1913  | 16                   | 55.8                              | .353                            | 19.57                              |                                                | 10                    | 2                |    | 4                     |    |                       |
| 29       |                                                             | 1914  | 15                   | 55.9                              | .305                            | 17.09                              |                                                | 9                     | 2                |    | 4                     |    |                       |
| 30       | 7 plants.....                                               | 1914  | 16                   | 55.0                              | .312                            | 17.47                              |                                                | 9                     | 3                |    | 4                     |    |                       |
| 31       |                                                             | 1915  | 16                   | 55.1                              | .321                            | 17.76                              | 6                                              | 3                     | 3                |    | 4                     |    |                       |
|          | Roll hands, all sizes:                                      |       |                      |                                   |                                 |                                    |                                                |                       |                  |    |                       |    |                       |
| 32       | Eastern—                                                    |       |                      |                                   |                                 |                                    |                                                |                       |                  |    |                       |    |                       |
| 33       | 7 plants.....                                               | 1913  | 27                   | 56.2                              | .224                            | 12.61                              |                                                | 11                    | 10               |    | 6                     |    |                       |
|          |                                                             | 1914  | 26                   | 56.3                              | .212                            | 11.91                              |                                                | 11                    | 9                |    | 6                     |    |                       |
| 34       | 10 plants.....                                              | 1914  | 32                   | 57.2                              | .216                            | 12.34                              |                                                | 15                    | 9                |    | 8                     |    |                       |
| 35       |                                                             | 1915  | 29                   | 56.8                              | .210                            | 11.89                              |                                                | 15                    | 9                |    | 5                     |    |                       |
| 36       | Pittsburgh—                                                 |       |                      |                                   |                                 |                                    |                                                |                       |                  |    |                       |    |                       |
| 37       | 10 plants.....                                              | 1913  | 121                  | 63.5                              | .358                            | 22.61                              |                                                | 18                    |                  |    | 103                   |    |                       |
|          |                                                             | 1914  | 121                  | 64.0                              | .306                            | 19.47                              |                                                | 18                    |                  |    | 103                   |    |                       |
| 38       | 13 plants.....                                              | 1914  | 135                  | 63.4                              | .308                            | 19.21                              |                                                | 18                    |                  |    | 117                   |    |                       |
| 39       |                                                             | 1915  | 133                  | 62.2                              | .316                            | 19.51                              |                                                | 18                    | 9                |    | 106                   |    |                       |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 4                                |                                  |                                  | 3                                | 2                                |                                  |                                  |                            | 1           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 4                                |                                  | 4                                | 1                                |                                  |                                  |                                  |                            | 2           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 4                                |                                  | 6                                | 1                                |                                  |                                  |                                  |                            | 3           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 4                                |                                  | 2                                | 5                                |                                  |                                  |                                  |                            | 4           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                                  |                                  |                                  |                            | 5           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 6                                |                                  | 5                                | 10                               |                                  | 2                                |                                  |                            | 6           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 6                                |                                  | 6                                | 2                                |                                  |                                  |                                  |                            | 7           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 1                                | 10                               | 1                                | 2                                |                                  |                                  |                                  |                            | 8           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                                  | 1                                |                                  |                            | 9           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 1                                | 1                                |                                  | 1                                |                                  |                                  |                            | 10          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                                  |                                  |                                  |                            | 11          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 12          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                                  |                                  |                                  |                                  |                            | 13          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 4                                |                                  | 10                               |                                  |                                  | 2                                |                            | 14          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                | 6                                |                                  | 5                                | 2                                |                                  |                                  |                                  |                            | 15          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 6                                | 2                                | 6                                | 2                                | 1                                |                                  |                                  |                            | 16          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 3                                | 11                               | 2                                | 2                                | 1                                |                                  |                                  |                            | 17          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 18          |
|                                               |                                |                                |                                 |                                  | 2                                |                                  |                                  | 2                                | 2                                | 2                                |                                  |                                  |                                  |                                  |                            | 19          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                |                                  |                                  | 2                                | 1                                |                                  |                                  |                                  |                                  |                            | 20          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                | 2                                |                                  | 1                                |                            | 21          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 4                                |                                  |                                  |                                  |                            | 22          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                | 2                                |                                  |                                  |                            | 23          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                                  |                            | 24          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 2                                |                                  |                                  |                                  |                            | 25          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 1                                |                                  |                                  |                            | 26          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | 3                                |                                  |                                  |                            | 27          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                | 2                                | 2                                | 6                                | 2                                | 1                                |                                  | 1                          | 28          |
|                                               |                                |                                |                                 |                                  | 2                                |                                  |                                  |                                  | 2                                | 5                                | 4                                |                                  | 2                                |                                  |                            | 29          |
|                                               |                                |                                |                                 |                                  |                                  | 2                                |                                  |                                  | 2                                | 5                                | 4                                | 1                                |                                  | 2                                |                            | 30          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                |                                  | 2                                | 2                                | 5                                | 5                                |                                  |                                  |                            | 31          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                | 8                                | 8                                | 7                                | 2                                |                                  |                                  |                                  |                            | 32          |
|                                               |                                |                                |                                 |                                  | 2                                | 2                                | 2                                | 6                                | 8                                | 5                                | 1                                |                                  |                                  |                                  |                            | 33          |
|                                               |                                |                                |                                 |                                  | 2                                | 5                                | 1                                | 6                                | 9                                | 7                                | 2                                |                                  |                                  |                                  |                            | 34          |
|                                               |                                |                                |                                 | 1                                |                                  | 3                                | 6                                | 6                                | 6                                | 5                                | 2                                |                                  |                                  |                                  |                            | 35          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 | 1                                | 3                                |                                  | 2                                | 6                                | 5                                | 21                               | 53                               | 14                               | 11                               |                                  | 2                          | 36          |
|                                               |                                |                                |                                 | 3                                | 1                                | 2                                |                                  | 14                               | 16                               | 34                               | 39                               | 2                                | 7                                |                                  | 1                          | 37          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 | 3                                | 1                                | 2                                |                                  | 16                               | 17                               | 35                               | 49                               | 2                                | 7                                |                                  | 2                          | 38          |
|                                               |                                |                                |                                 |                                  | 5                                | 1                                |                                  | 11                               | 19                               | 34                               | 41                               | 13                               | 5                                |                                  | 2                          | 39          |

TABLE P.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, 1913 TO 1915—

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Roll hands, all sizes—                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 2        | Concluded.                                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
|          | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
|          | 4 plants.....                               | 1913  | 36                   | 68.9                              | \$0.292                         | \$20.09                            |                                                |                      |                 |    | 36                   |    |                      |    |
|          |                                             | 1914  | 36                   | 68.9                              | .280                            | 19.18                              |                                                |                      |                 |    | 36                   |    |                      |    |
| 3        | 11 plants.....                              | 1914  | 58                   | 66.7                              | .295                            | 19.69                              |                                                |                      |                 |    | 58                   |    |                      |    |
| 4        |                                             | 1915  | 58                   | 66.8                              | .307                            | 20.49                              |                                                |                      |                 |    | 58                   |    |                      |    |
| 5        | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 6        | 3 plants.....                               | 1913  | 15                   | 60.7                              | .201                            | 12.39                              |                                                |                      | 9               |    | 6                    |    |                      |    |
| 7        |                                             | 1914  | 15                   | 60.7                              | .187                            | 11.41                              |                                                |                      | 9               |    | 6                    |    |                      |    |
|          |                                             | 1915  | 15                   | 60.7                              | .170                            | 10.34                              |                                                |                      | 9               |    | 6                    |    |                      |    |
| 8        | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 9        | 24 plants.....                              | 1913  | 199                  | 63.2                              | .316                            | 20.02                              |                                                | 29                   | 19              |    | 151                  |    |                      |    |
|          |                                             | 1914  | 198                  | 63.6                              | .280                            | 17.82                              |                                                | 29                   | 18              |    | 151                  |    |                      |    |
| 10       | 37 plants.....                              | 1914  | 240                  | 63.2                              | .285                            | 17.92                              |                                                | 33                   | 18              |    | 189                  |    |                      |    |
| 11       |                                             | 1915  | 235                  | 62.6                              | .291                            | 18.23                              |                                                | 33                   | 27              |    | 175                  |    |                      |    |
| 12       | Hotbed men:                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 13       | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
|          | 12 plants.....                              | 1913  | 131                  | 58.3                              | .198                            | 11.61                              |                                                | 50                   | 39              |    | 30                   | 12 |                      |    |
|          |                                             | 1914  | 118                  | 58.3                              | .199                            | 11.75                              |                                                | 51                   | 27              |    | 28                   | 12 |                      |    |
| 14       | 15 plants.....                              | 1914  | 155                  | 58.5                              | .207                            | 12.22                              |                                                | 64                   | 34              |    | 45                   | 12 |                      |    |
| 15       |                                             | 1915  | 167                  | 58.5                              | .206                            | 12.08                              |                                                | 61                   | 49              |    | 45                   | 12 |                      |    |
| 16       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 17       | 11 plants.....                              | 1913  | 260                  | 61.3                              | .238                            | 14.49                              | 12                                             | 56                   | 46              |    | 142                  | 4  |                      |    |
|          |                                             | 1914  | 254                  | 61.6                              | .217                            | 13.27                              | 12                                             | 59                   | 26              |    | 133                  | 4  |                      |    |
| 18       | 14 plants.....                              | 1914  | 291                  | 61.3                              | .217                            | 13.19                              | 12                                             | 73                   | 33              |    | 169                  | 4  |                      |    |
| 19       |                                             | 1915  | 290                  | 60.4                              | .227                            | 13.49                              | 81                                             | 4                    | 31              |    | 141                  | 33 |                      |    |
| 20       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 21       | 11 plants.....                              | 1913  | 135                  | 62.5                              | .213                            | 13.20                              | 9                                              | 18                   | 12              | 13 | 75                   | 8  |                      |    |
|          |                                             | 1914  | 132                  | 62.7                              | .213                            | 13.22                              | 9                                              | 17                   | 9               | 13 | 76                   | 8  |                      |    |
| 22       | 18 plants.....                              | 1914  | 199                  | 61.8                              | .218                            | 13.37                              | 9                                              | 45                   | 16              | 13 | 110                  | 6  |                      |    |
| 23       |                                             | 1915  | 195                  | 61.9                              | .216                            | 13.30                              | 9                                              | 50                   | 16              |    | 112                  | 8  |                      |    |
| 24       | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 25       | 9 plants.....                               | 1913  | 74                   | 55.9                              | .187                            | 10.34                              | 18                                             | 15                   | 21              |    | 20                   |    |                      |    |
| 26       |                                             | 1914  | 69                   | 56.2                              | .189                            | 10.49                              | 14                                             | 18                   | 19              |    | 14                   | 4  |                      |    |
|          |                                             | 1915  | 69                   | 56.2                              | .189                            | 10.49                              | 14                                             | 18                   | 19              |    | 14                   | 4  |                      |    |
| 27       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 28       | 43 plants.....                              | 1913  | 600                  | 60.3                              | .217                            | 13.06                              | 39                                             | 139                  | 118             | 13 | 267                  | 24 |                      |    |
|          |                                             | 1914  | 573                  | 60.6                              | .209                            | 12.61                              | 35                                             | 145                  | 81              | 13 | 271                  | 28 |                      |    |
| 29       | 56 plants.....                              | 1914  | 714                  | 60.3                              | .213                            | 12.77                              | 35                                             | 200                  | 102             | 13 | 338                  | 26 |                      |    |
| 30       |                                             | 1915  | 721                  | 60.0                              | .216                            | 12.83                              | 104                                            | 133                  | 115             |    | 312                  | 57 |                      |    |
| 31       | Shearmen:                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 32       | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
|          | 12 plants.....                              | 1913  | 64                   | 56.7                              | .218                            | 12.22                              |                                                | 35                   | 9               | 6  | 12                   | 2  |                      |    |
|          |                                             | 1914  | 57                   | 56.8                              | .216                            | 12.05                              |                                                | 31                   | 7               | 5  | 12                   | 2  |                      |    |
| 33       | 15 plants.....                              | 1914  | 75                   | 57.6                              | .222                            | 12.64                              |                                                | 37                   | 8               | 5  | 23                   | 2  |                      |    |
| 34       |                                             | 1915  | 72                   | 57.8                              | .228                            | 12.97                              |                                                | 32                   | 11              | 5  | 22                   | 2  |                      |    |
| 35       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 36       | 10 plants.....                              | 1913  | 73                   | 62.0                              | .336                            | 20.60                              |                                                | 16                   | 16              | 1  | 38                   | 2  |                      |    |
|          |                                             | 1914  | 69                   | 62.3                              | .300                            | 18.51                              |                                                | 16                   | 10              | 3  | 37                   | 3  |                      |    |
| 37       | 13 plants.....                              | 1914  | 86                   | 62.0                              | .293                            | 17.94                              |                                                | 20                   | 13              | 3  | 47                   | 3  |                      |    |
| 38       |                                             | 1915  | 88                   | 61.6                              | .309                            | 18.67                              | 18                                             | 2                    | 13              | 1  | 47                   | 7  |                      |    |
| 39       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 40       | 10 plants.....                              | 1913  | 53                   | 63.1                              | .296                            | 18.12                              | 5                                              | 6                    | 3               | 5  | 31                   | 1  | 2                    |    |
|          |                                             | 1914  | 52                   | 62.7                              | .307                            | 18.64                              | 5                                              | 5                    | 3               | 5  | 31                   | 3  |                      |    |
| 41       | 17 plants.....                              | 1914  | 75                   | 62.8                              | .338                            | 20.81                              | 5                                              | 9                    | 5               | 8  | 45                   | 3  |                      |    |
| 42       |                                             | 1915  | 77                   | 62.8                              | .356                            | 22.14                              | 5                                              | 10                   | 6               | 4  | 49                   | 3  |                      |    |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were— |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No. |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------|
| 6<br>and<br>under<br>7<br>cts.                | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 12                               | 2                                |                                  | 20                               |                                  |                                  | 2                                |                            | 1           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 12                               | 2                                | 14                               | 6                                |                                  |                                  | 2                                |                            | 2           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 15                               | 5                                | 20                               | 10                               | 4                                | 4                                |                                  |                            | 3           |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 13                               | 6                                | 6                                | 22                               | 6                                | 5                                |                                  |                            | 4           |
|                                               |                                |                                |                                 |                                  | 4                                | 2                                | 2                                |                                  | 2                                | 5                                |                                  |                                  |                                  |                                  |                            | 5           |
|                                               |                                |                                |                                 |                                  | 4                                | 4                                | 5                                | 1                                | 4                                | 1                                |                                  |                                  |                                  |                                  |                            | 6           |
|                                               |                                |                                |                                 |                                  | 1                                | 5                                | 6                                | 2                                |                                  | 1                                |                                  |                                  |                                  |                                  |                            | 7           |
|                                               |                                |                                |                                 | 1                                | 7                                | 2                                | 6                                | 26                               | 17                               | 33                               | 75                               | 14                               | 11                               | 4                                | 3                          | 8           |
|                                               |                                |                                |                                 | 3                                | 3                                | 8                                | 7                                | 33                               | 30                               | 54                               | 46                               | 2                                | 9                                | 1                                | 2                          | 9           |
|                                               |                                |                                |                                 | 3                                | 3                                | 11                               | 6                                | 38                               | 35                               | 63                               | 61                               | 6                                | 11                               | 1                                |                            | 10          |
|                                               |                                |                                |                                 | 1                                | 6                                | 9                                | 12                               | 32                               | 31                               | 46                               | 65                               | 19                               | 10                               | 2                                | 2                          | 11          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 | 2                                | 4                                | 9                                | 15                               | 48                               | 42                               | 11                               |                                  |                                  |                                  |                                  |                            | 12          |
|                                               |                                |                                |                                 | 2                                | 4                                | 8                                | 22                               | 30                               | 37                               | 15                               |                                  |                                  |                                  |                                  |                            | 13          |
|                                               |                                |                                |                                 | 2                                | 6                                | 12                               | 23                               | 31                               | 52                               | 28                               | 1                                |                                  |                                  |                                  |                            | 14          |
|                                               |                                |                                |                                 | 4                                | 4                                | 5                                | 32                               | 32                               | 65                               | 21                               | 4                                |                                  |                                  |                                  |                            | 15          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                | 3                              | 2                               | 5                                | 6                                | 17                               | 5                                | 21                               | 111                              | 46                               | 31                               | 10                               |                                  |                                  |                            | 16          |
|                                               | 3                              | 3                              |                                 | 8                                | 4                                | 14                               | 22                               | 36                               | 97                               | 50                               | 17                               |                                  |                                  |                                  |                            | 17          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               | 3                              | 3                              |                                 | 8                                | 4                                | 18                               | 25                               | 40                               | 116                              | 53                               | 21                               |                                  |                                  |                                  |                            | 18          |
|                                               | 3                              | 3                              |                                 | 2                                | 2                                | 15                               | 17                               | 54                               | 112                              | 50                               | 18                               | 14                               |                                  |                                  |                            | 19          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 | 2                                |                                  | 8                                | 6                                | 46                               | 54                               | 15                               | 4                                |                                  |                                  |                                  |                            | 20          |
|                                               |                                |                                |                                 | 2                                |                                  | 8                                | 5                                | 50                               | 43                               | 20                               | 4                                |                                  |                                  |                                  |                            | 21          |
|                                               |                                |                                |                                 |                                  |                                  | 8                                | 20                               | 54                               | 75                               | 34                               | 8                                |                                  |                                  |                                  |                            | 22          |
|                                               |                                |                                |                                 |                                  |                                  | 8                                | 21                               | 47                               | 84                               | 21                               | 14                               |                                  |                                  |                                  |                            | 23          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 | 2                                | 2                                | 13                               | 24                               | 12                               | 14                               | 7                                |                                  |                                  |                                  |                                  |                            | 24          |
|                                               |                                |                                |                                 |                                  |                                  | 18                               | 20                               | 10                               | 5                                | 10                               | 2                                |                                  |                                  |                                  |                            | 25          |
|                                               |                                |                                |                                 | 8                                | 2                                | 12                               | 16                               | 12                               | 8                                | 8                                | 1                                | 2                                |                                  |                                  |                            | 26          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                | 3                              |                                 | 11                               | 12                               | 47                               | 50                               | 127                              | 221                              | 79                               | 35                               | 10                               |                                  |                                  |                            | 27          |
|                                               | 3                              | 3                              | 2                               | 12                               | 10                               | 48                               | 69                               | 126                              | 182                              | 95                               | 23                               |                                  |                                  |                                  |                            | 28          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               | 3                              | 3                              | 2                               | 10                               | 12                               | 56                               | 88                               | 135                              | 248                              | 125                              | 32                               |                                  |                                  |                                  |                            | 29          |
|                                               | 3                              | 3                              |                                 | 14                               | 8                                | 40                               | 86                               | 145                              | 269                              | 100                              | 37                               | 16                               |                                  |                                  |                            | 30          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  | 4                                | 2                                | 9                                | 13                               | 24                               | 8                                | 1                                | 3                                |                                  |                                  |                            | 31          |
|                                               |                                |                                |                                 |                                  | 4                                | 4                                | 7                                | 10                               | 21                               | 5                                | 4                                | 2                                |                                  |                                  |                            | 32          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  | 4                                | 4                                | 7                                | 14                               | 28                               | 10                               | 6                                | 2                                |                                  |                                  |                            | 33          |
|                                               |                                |                                |                                 | 2                                | 6                                | 2                                | 10                               | 6                                | 28                               | 3                                | 13                               | 2                                |                                  |                                  |                            | 34          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 2                                | 2                                | 7                                | 26                               | 19                               | 10                               | 4                                | 3                                |                            | 35          |
|                                               |                                |                                |                                 |                                  | 1                                | 2                                | 1                                | 2                                | 6                                | 26                               | 22                               | 8                                | 1                                |                                  |                            | 36          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  | 1                                | 2                                | 1                                | 3                                | 19                               | 26                               | 22                               | 11                               | 1                                |                                  |                            | 37          |
|                                               |                                |                                |                                 |                                  |                                  |                                  | 1                                | 3                                | 18                               | 30                               | 22                               | 9                                | 5                                |                                  |                            | 38          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 30                               | 4                                | 8                                | 7                                | 3                                | 1                                |                            | 39          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 31                               | 2                                | 8                                | 5                                | 3                                | 3                                |                            | 40          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            |             |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  | 2                                | 30                               | 14                               | 11                               | 5                                | 7                                | 8                                |                            | 41          |
|                                               |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 25                               | 20                               | 9                                | 5                                | 5                                | 5                                | 6                          | 42          |

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TABLE P.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, 1913 TO 1915—

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |       |                      |       |                      |       |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-------|----------------------|-------|----------------------|-------|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60    | Over 60 and under 72 | 72    | Over 72 and under 84 | 84    |
| 1        | Shearmen—Concld. Southern—                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 2        | 9 plants.....                               | 1913  | 28                   | 57.7                              | \$0.255                         | \$14.40                            | 6                                              | 2                    | 4               | 8     | 8                    | ..... | .....                | ..... |
| 3        |                                             | 1914  | 27                   | 57.8                              | .238                            | 13.46                              | 5                                              | 2                    | 6               | 8     | 5                    | 1     | .....                | ..... |
|          |                                             | 1915  | 27                   | 57.6                              | .234                            | 13.14                              | 5                                              | 3                    | 6               | 7     | 5                    | 1     | .....                | ..... |
| 4        | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 5        | 41 plants.....                              | 1913  | 218                  | 60.2                              | .281                            | 16.74                              | 11                                             | 59                   | 32              | 20    | 89                   | 5     | 2                    | ..... |
|          |                                             | 1914  | 205                  | 60.3                              | .270                            | 16.08                              | 10                                             | 54                   | 26              | 21    | 85                   | 9     | .....                | ..... |
| 6        | 54 plants.....                              | 1914  | 263                  | 60.5                              | .280                            | 16.78                              | 10                                             | 68                   | 32              | 24    | 120                  | 9     | .....                | ..... |
| 7        |                                             | 1915  | 264                  | 60.5                              | .293                            | 17.56                              | 28                                             | 47                   | 36              | 17    | 123                  | 13    | .....                | ..... |
| 8        | Shearmen's helpers: Eastern—                |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 9        | 8 plants.....                               | 1913  | 57                   | 60.1                              | .176                            | 10.50                              | .....                                          | 18                   | 3               | 8     | 28                   | ..... | .....                | ..... |
|          |                                             | 1914  | 53                   | 60.8                              | .168                            | 10.15                              | .....                                          | 13                   | 3               | 8     | 29                   | ..... | .....                | ..... |
| 10       | 11 plants.....                              | 1914  | 65                   | 60.2                              | .185                            | 11.04                              | .....                                          | 19                   | 3               | 8     | 35                   | ..... | .....                | ..... |
| 11       |                                             | 1915  | 59                   | 59.5                              | .183                            | 10.84                              | .....                                          | 20                   | 3               | 8     | 28                   | ..... | .....                | ..... |
| 12       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 13       | 10 plants.....                              | 1913  | 207                  | 63.1                              | .227                            | 14.25                              | 41                                             | 14                   | .....           | 142   | 10                   | ..... | .....                | ..... |
|          |                                             | 1914  | 185                  | 63.9                              | .207                            | 13.30                              | 30                                             | 14                   | .....           | 131   | 10                   | ..... | .....                | ..... |
| 14       | 13 plants.....                              | 1914  | 225                  | 63.4                              | .206                            | 13.13                              | 38                                             | 22                   | .....           | 155   | 10                   | ..... | .....                | ..... |
| 15       |                                             | 1915  | 229                  | 63.0                              | .217                            | 13.69                              | 33                                             | 4                    | 23              | 1     | 139                  | 29    | .....                | ..... |
| 16       | G. L. and M. W.—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 17       | 10 plants.....                              | 1913  | 102                  | 65.1                              | .207                            | 13.18                              | 8                                              | 8                    | 3               | 10    | 61                   | 2     | 10                   | ..... |
|          |                                             | 1914  | 97                   | 64.3                              | .207                            | 12.97                              | 8                                              | 7                    | 3               | 10    | 57                   | 12    | .....                | ..... |
| 18       | 17 plants.....                              | 1914  | 155                  | 63.9                              | .208                            | 13.04                              | 8                                              | 17                   | 5               | 14    | 101                  | 10    | .....                | ..... |
| 19       |                                             | 1915  | 139                  | 63.8                              | .202                            | 12.73                              | 5                                              | 23                   | 6               | 4     | 99                   | 2     | .....                | ..... |
| 20       | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 21       | 7 plants.....                               | 1913  | 52                   | 59.2                              | .175                            | 10.20                              | 10                                             | 3                    | 9               | 5     | 25                   | ..... | .....                | ..... |
|          |                                             | 1914  | 42                   | 58.4                              | .173                            | 10.18                              | 7                                              | 3                    | 8               | 5     | 15                   | 4     | .....                | ..... |
| 22       |                                             | 1915  | 44                   | 58.3                              | .162                            | 9.48                               | 7                                              | 3                    | 10              | 5     | 15                   | 4     | .....                | ..... |
| 23       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 24       | 35 plants.....                              | 1913  | 418                  | 62.7                              | .209                            | 12.98                              | 18                                             | 70                   | 29              | 23    | 256                  | 12    | 10                   | ..... |
|          |                                             | 1914  | 377                  | 62.9                              | .198                            | 12.43                              | 15                                             | 53                   | 28              | 23    | 232                  | 26    | .....                | ..... |
| 25       | 48 plants.....                              | 1914  | 487                  | 62.7                              | .201                            | 12.57                              | 15                                             | 77                   | 38              | 27    | 306                  | 24    | .....                | ..... |
| 26       |                                             | 1915  | 471                  | 62.3                              | .203                            | 12.66                              | 45                                             | 50                   | 42              | 18    | 281                  | 35    | .....                | ..... |
| 27       | Bundlers: Eastern—                          |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 28       | 2 plants.....                               | 1913  | 4                    | 52.5                              | .200                            | 10.50                              | .....                                          | 4                    | .....           | ..... | .....                | ..... | .....                | ..... |
|          |                                             | 1914  | 4                    | 52.5                              | .200                            | 10.50                              | .....                                          | 4                    | .....           | ..... | .....                | ..... | .....                | ..... |
| 29       | 2 plants.....                               | 1914  | 8                    | 53.8                              | .206                            | 11.09                              | .....                                          | 8                    | .....           | ..... | .....                | ..... | .....                | ..... |
| 30       |                                             | 1915  | 6                    | 53.3                              | .217                            | 11.58                              | .....                                          | 6                    | .....           | ..... | .....                | ..... | .....                | ..... |
| 31       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 32       | 7 plants.....                               | 1913  | 168                  | 61.5                              | .221                            | 13.61                              | .....                                          | 123                  | 1               | 44    | .....                | ..... | .....                | ..... |
|          |                                             | 1914  | 157                  | 64.5                              | .206                            | 13.25                              | .....                                          | 66                   | 1               | 90    | .....                | ..... | .....                | ..... |
| 33       | 8 plants.....                               | 1914  | 163                  | 64.5                              | .205                            | 13.24                              | .....                                          | 66                   | 1               | 96    | .....                | ..... | .....                | ..... |
| 34       |                                             | 1915  | 197                  | 64.8                              | .210                            | 13.58                              | .....                                          | 69                   | .....           | 120   | 8                    | ..... | .....                | ..... |
| 35       | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 36       | 3 plants.....                               | 1913  | 6                    | 63.1                              | .143                            | 9.07                               | .....                                          | .....                | 2               | 4     | .....                | ..... | .....                | ..... |
|          |                                             | 1914  | 7                    | 61.9                              | .140                            | 8.69                               | .....                                          | 3                    | .....           | 2     | .....                | ..... | .....                | ..... |
| 37       |                                             | 1915  | 7                    | 61.9                              | .149                            | 9.28                               | .....                                          | 3                    | 2               | 2     | .....                | ..... | .....                | ..... |
| 38       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |       |                      |       |                      |       |
| 39       | 12 plants.....                              | 1913  | 178                  | 61.4                              | .218                            | 13.38                              | .....                                          | 4                    | 123             | 3     | 48                   | ..... | .....                | ..... |
|          |                                             | 1914  | 168                  | 64.1                              | .203                            | 13.00                              | .....                                          | 4                    | 69              | 3     | 92                   | ..... | .....                | ..... |
| 40       | 13 plants.....                              | 1914  | 178                  | 63.9                              | .203                            | 12.97                              | .....                                          | 8                    | 69              | 3     | 98                   | ..... | .....                | ..... |
| 41       |                                             | 1915  | 210                  | 64.4                              | .208                            | 13.38                              | .....                                          | 6                    | 72              | 2     | 122                  | 8     | .....                | ..... |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
BAR MILLS—Continued.

| Employees whose rates of wages per hour were-- |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | Line<br>No.          |
|------------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|----------------------|
| 6<br>and<br>under<br>7<br>cts.                 | 7<br>and<br>under<br>8<br>cts. | 8<br>and<br>under<br>9<br>cts. | 9<br>and<br>under<br>10<br>cts. | 10<br>and<br>under<br>12<br>cts. | 12<br>and<br>under<br>14<br>cts. | 14<br>and<br>under<br>16<br>cts. | 16<br>and<br>under<br>18<br>cts. | 18<br>and<br>under<br>20<br>cts. | 20<br>and<br>under<br>25<br>cts. | 25<br>and<br>under<br>30<br>cts. | 30<br>and<br>under<br>40<br>cts. | 40<br>and<br>under<br>50<br>cts. | 50<br>and<br>under<br>60<br>cts. | 60<br>and<br>under<br>70<br>cts. | 70<br>cts.<br>and<br>over. | Line<br>No.          |
|                                                |                                |                                |                                 |                                  |                                  | 9<br>8<br>10                     | 2<br>4<br>3                      | 2<br>1<br>2                      | 4<br>5<br>4                      | 2<br>1<br>1                      | 3<br>5<br>5                      | 6<br>2<br>2                      |                                  |                                  |                            | 1<br>2<br>3          |
|                                                |                                |                                |                                 |                                  | 4<br>5                           | 11<br>14                         | 13<br>12                         | 17<br>13                         | 65<br>63                         | 40<br>34                         | 31<br>39                         | 26<br>17                         | 7<br>5                           | 4<br>3                           |                            | 4<br>5               |
|                                                |                                |                                |                                 | 2                                | 5<br>6                           | 14<br>12                         | 12<br>14                         | 18<br>13                         | 82<br>75                         | 51<br>53                         | 44<br>49                         | 20<br>18                         | 9<br>11                          | 8<br>5                           | 6                          | 6<br>7               |
|                                                |                                |                                |                                 |                                  | 6<br>10                          | 19<br>19                         | 8<br>7                           | 10<br>9                          | 12<br>6                          | 2<br>2                           |                                  |                                  |                                  |                                  |                            | 8<br>9               |
|                                                |                                |                                |                                 | 4                                | 10<br>3                          | 19<br>17                         | 8<br>13                          | 12<br>7                          | 8<br>8                           | 2<br>6                           | 6<br>1                           |                                  |                                  |                                  |                            | 10<br>11             |
| 2                                              |                                |                                |                                 | 2                                | 2<br>2                           | 2<br>8                           | 12<br>10                         | 30<br>45                         | 99<br>103                        | 32<br>15                         | 24<br>2                          | 2                                |                                  |                                  |                            | 12<br>13             |
|                                                |                                |                                |                                 |                                  | 2<br>2                           | 8<br>16                          | 16<br>16                         | 51<br>40                         | 131<br>145                       | 15<br>18                         | 2<br>8                           |                                  |                                  |                                  |                            | 14<br>15             |
|                                                |                                |                                |                                 |                                  | 12<br>12                         |                                  | 10<br>10                         | 50<br>46                         | 12<br>11                         | 8<br>4                           | 10<br>14                         |                                  |                                  |                                  |                            | 16<br>17             |
|                                                |                                |                                |                                 |                                  | 12<br>12                         |                                  | 21<br>5                          | 64<br>70                         | 34<br>33                         | 8<br>13                          | 15<br>6                          | 1                                |                                  |                                  |                            | 18<br>19             |
|                                                |                                |                                |                                 | 2                                | 11<br>10<br>8                    | 18<br>14<br>13                   | 1<br>4<br>6                      | 11<br>6<br>5                     | 9<br>5<br>4                      |                                  | 2<br>1<br>1                      |                                  |                                  |                                  |                            | 20<br>21<br>22       |
| 2                                              |                                |                                |                                 | 2                                | 31<br>34                         | 39<br>41                         | 31<br>31                         | 101<br>106                       | 132<br>125                       | 42<br>23                         | 36<br>17                         | 2                                |                                  |                                  |                            | 23<br>24             |
|                                                |                                |                                |                                 | 2                                | 34<br>25                         | 41<br>30                         | 49<br>40                         | 133<br>122                       | 178<br>190                       | 27<br>38                         | 24<br>16                         | 1                                |                                  |                                  |                            | 25<br>26             |
|                                                |                                |                                |                                 |                                  |                                  |                                  |                                  |                                  | 4<br>4<br>8<br>5                 |                                  |                                  |                                  |                                  |                                  |                            | 27<br>28<br>29<br>30 |
|                                                |                                |                                |                                 |                                  | 1                                | 1                                | 2                                | 26<br>74                         | 126<br>79                        | 12<br>1                          | 2<br>1                           |                                  |                                  |                                  |                            | 31<br>32             |
|                                                |                                |                                |                                 |                                  | 1                                | 1                                |                                  | 74<br>104                        | 85<br>72                         | 1<br>19                          | 1<br>1                           |                                  |                                  |                                  |                            | 33<br>34             |
|                                                |                                |                                |                                 |                                  | 2<br>2<br>2                      | 4<br>5<br>2                      |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                            | 35<br>36<br>37       |
|                                                |                                |                                |                                 |                                  | 2<br>3                           | 4<br>6                           | 2                                | 26<br>74                         | 130<br>83                        | 12<br>1                          | 2<br>1                           |                                  |                                  |                                  |                            | 38<br>39             |
|                                                |                                |                                |                                 |                                  | 3<br>2                           | 6<br>2                           |                                  | 74<br>105                        | 93<br>77                         | 1<br>20                          | 1<br>1                           |                                  |                                  |                                  |                            | 40<br>41             |

TABLE P.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                       |                  |     |                       |     |                       |     |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|-----------------------|------------------|-----|-----------------------|-----|-----------------------|-----|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56. | 56 and under 60. | 60. | Over 60 and under 72. | 72. | Over 72 and under 84. | 84. |
|          | Laborers: Eastern—                          |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 1        | 12 plants.....                              | 1913  | 255                  | 58.8                              | \$0.156                         | \$9.17                             |                                                | 39                    | 95               | 107 | 14                    |     |                       |     |
| 2        |                                             | 1914  | 194                  | 61.7                              | .151                            | 9.35                               |                                                | 6                     | 27               | 118 | 19                    | 24  |                       |     |
| 3        | 13 plants.....                              | 1914  | 200                  | 61.8                              | .151                            | 9.38                               |                                                | 6                     | 22               | 123 | 25                    | 24  |                       |     |
| 4        |                                             | 1915  | 213                  | 61.4                              | .150                            | 9.25                               |                                                | 11                    | 35               | 108 | 48                    | 11  |                       |     |
| 5        | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 6        | 11 plants.....                              | 1913  | 319                  | 66.5                              | .183                            | 12.19                              |                                                | 10                    | 16               | 77  | 171                   | 4   | 39                    | 2   |
|          |                                             | 1914  | 338                  | 66.6                              | .180                            | 12.00                              |                                                | 10                    | 21               | 60  | 219                   | 17  | 9                     | 2   |
| 7        | 14 plants.....                              | 1914  | 445                  | 65.5                              | .183                            | 12.00                              | 6                                              | 20                    | 34               | 63  | 288                   | 21  | 9                     | 4   |
| 8        |                                             | 1915  | 413                  | 65.1                              | .184                            | 11.96                              | 9                                              | 23                    | 40               | 66  | 216                   | 52  | 4                     | 3   |
| 9        | G. L. and M.W.—                             |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 10       | 10 plants.....                              | 1913  | 160                  | 64.8                              | .189                            | 12.41                              |                                                |                       | 7                | 32  | 98                    | 16  | 5                     | 2   |
|          |                                             | 1914  | 123                  | 65.0                              | .192                            | 12.49                              |                                                |                       | 14               | 27  | 61                    | 14  | 5                     | 2   |
| 11       | 18 plants.....                              | 1914  | 253                  | 63.5                              | .190                            | 12.09                              |                                                | 15                    | 34               | 51  | 122                   | 24  | 5                     | 2   |
| 12       |                                             | 1915  | 267                  | 63.3                              | .190                            | 12.03                              |                                                | 17                    | 30               | 44  | 161                   | 13  | 2                     |     |
| 13       | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 14       | 9 plants.....                               | 1913  | 157                  | 58.1                              | .142                            | 8.22                               | 1                                              | 34                    | 32               | 76  | 14                    |     |                       |     |
| 15       |                                             | 1914  | 141                  | 58.1                              | .141                            | 8.15                               | 1                                              | 26                    | 28               | 81  | 2                     | 3   |                       |     |
|          |                                             | 1915  | 136                  | 57.9                              | .142                            | 8.17                               | 1                                              | 26                    | 40               | 64  | 2                     | 3   |                       |     |
| 16       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 17       | 42 plants.....                              | 1913  | 891                  | 62.5                              | .169                            | 10.66                              | 1                                              | 83                    | 150              | 232 | 297                   | 20  | 41                    | 4   |
| 18       |                                             | 1914  | 796                  | 63.6                              | .168                            | 10.75                              | 1                                              | 42                    | 90               | 286 | 301                   | 58  | 14                    | 4   |
| 19       | 54 plants.....                              | 1914  | 1,039                | 63.3                              | .173                            | 11.00                              | 7                                              | 67                    | 118              | 318 | 437                   | 72  | 14                    | 6   |
|          |                                             | 1915  | 1,029                | 62.9                              | .173                            | 10.91                              | 10                                             | 77                    | 145              | 282 | 427                   | 79  | 6                     | 3   |
|          | Unclassified—productive:                    |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
|          | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 20       | 6 plants.....                               | 1914  | 36                   | 61.2                              | .157                            | 9.56                               |                                                | 9                     |                  | 9   | 15                    | 3   |                       |     |
| 21       |                                             | 1915  | 36                   | 61.2                              | .155                            | 9.43                               |                                                | 7                     |                  | 11  | 18                    |     |                       |     |
| 22       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 23       | 11 plants.....                              | 1914  | 119                  | 66.7                              | .215                            | 13.73                              |                                                |                       | 4                | 37  | 63                    | 13  | 2                     |     |
|          |                                             | 1915  | 141                  | 64.8                              | .225                            | 14.64                              | 3                                              |                       | 32               | 17  | 57                    | 26  | 6                     |     |
| 24       | G. L. and M.W.—                             |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 25       | 18 plants.....                              | 1914  | 176                  | 64.1                              | .215                            | 13.72                              | 11                                             | 16                    | 8                | 4   | 106                   | 25  |                       | 6   |
|          |                                             | 1915  | 177                  | 64.4                              | .218                            | 14.00                              | 5                                              | 17                    | 10               | 3   | 106                   | 32  | 2                     | 2   |
| 26       | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 27       | 8 plants.....                               | 1914  | 61                   | 57.9                              | .159                            | 9.17                               | 1                                              | 18                    | 17               | 16  | 5                     | 4   |                       |     |
|          |                                             | 1915  | 65                   | 58.4                              | .155                            | 9.02                               | 1                                              | 14                    | 15               | 27  | 4                     | 4   |                       |     |
| 28       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 29       | 43 plants.....                              | 1914  | 392                  | 63.6                              | .201                            | 12.63                              | 12                                             | 43                    | 29               | 66  | 189                   | 45  | 2                     | 6   |
|          |                                             | 1915  | 419                  | 63.3                              | .205                            | 13.05                              | 9                                              | 38                    | 57               | 58  | 185                   | 62  | 8                     | 2   |
|          | Unclassified—nonproductive:                 |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
|          | Eastern—                                    |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 30       | 11 plants.....                              | 1914  | 253                  | 63.2                              | .202                            | 12.58                              |                                                | 19                    | 19               | 134 | 16                    | 54  | 11                    |     |
| 31       |                                             | 1915  | 297                  | 61.3                              | .212                            | 12.87                              |                                                | 17                    | 29               | 201 | 24                    | 12  | 14                    |     |
| 32       | Pittsburgh—                                 |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 33       | 11 plants.....                              | 1914  | 298                  | 66.8                              | .212                            | 14.09                              | 1                                              | 9                     | 16               | 108 | 47                    | 21  | 81                    | 15  |
|          |                                             | 1915  | 380                  | 65.9                              | .210                            | 13.86                              | 1                                              | 3                     | 134              | 46  | 42                    | 95  | 51                    | 8   |
| 34       | G. L. and M.W.—                             |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 35       | 12 plants.....                              | 1914  | 311                  | 68.8                              | .215                            | 14.78                              |                                                | 4                     | 10               | 36  | 138                   | 90  | 6                     | 27  |
|          |                                             | 1915  | 194                  | 66.6                              | .223                            | 14.72                              |                                                | 8                     | 5                | 48  | 70                    | 49  | 6                     | 8   |
| 36       | Southern—                                   |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 37       | 9 plants.....                               | 1914  | 225                  | 60.8                              | .190                            | 11.39                              | 1                                              | 45                    | 22               | 106 | 32                    | 7   | 1                     | 11  |
|          |                                             | 1915  | 222                  | 60.7                              | .189                            | 11.33                              | 1                                              | 44                    | 30               | 97  | 31                    | 8   | 1                     | 10  |
| 38       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |     |                       |     |
| 39       | 43 plants.....                              | 1914  | 1,087                | 65.3                              | .206                            | 13.38                              | 2                                              | 77                    | 67               | 384 | 233                   | 172 | 99                    | 53  |
|          |                                             | 1915  | 1,093                | 63.7                              | .208                            | 13.23                              | 2                                              | 72                    | 198              | 392 | 167                   | 164 | 72                    | 26  |



AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
BAR MILLS—Concluded.

| Employees whose rates of wages per hour were— |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   | Line No. |
|-----------------------------------------------|--------------------|--------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-------------------|----------|
| 6 and under 7 cts.                            | 7 and under 8 cts. | 8 and under 9 cts. | 9 and under 10 cts. | 10 and under 12 cts. | 12 and under 14 cts. | 14 and under 16 cts. | 16 and under 18 cts. | 18 and under 20 cts. | 20 and under 25 cts. | 25 and under 30 cts. | 30 and under 40 cts. | 40 and under 50 cts. | 50 and under 60 cts. | 60 and under 70 cts. | 70 cts. and over. |          |
|                                               |                    |                    |                     |                      | 26                   | 91                   | 110                  | 28                   |                      |                      |                      |                      |                      |                      |                   | 1        |
|                                               |                    |                    |                     |                      | 24                   | 86                   | 82                   | 2                    |                      |                      |                      |                      |                      |                      |                   | 2        |
|                                               |                    |                    |                     |                      | 24                   | 86                   | 88                   | 2                    |                      |                      |                      |                      |                      |                      |                   | 3        |
|                                               |                    |                    |                     |                      | 29                   | 103                  | 77                   | 4                    |                      |                      |                      |                      |                      |                      |                   | 4        |
|                                               |                    |                    |                     |                      |                      | 4                    | 177                  | 88                   | 50                   |                      |                      |                      |                      |                      |                   | 5        |
|                                               |                    |                    |                     |                      |                      | 21                   | 180                  | 105                  | 32                   |                      |                      |                      |                      |                      |                   | 6        |
|                                               |                    |                    |                     |                      |                      | 21                   | 202                  | 121                  | 101                  |                      |                      |                      |                      |                      |                   | 7        |
|                                               |                    |                    |                     |                      |                      | 20                   | 160                  | 130                  | 103                  |                      |                      |                      |                      |                      |                   | 8        |
|                                               |                    |                    |                     |                      |                      |                      | 37                   | 92                   | 31                   |                      |                      |                      |                      |                      |                   | 9        |
|                                               |                    |                    |                     |                      |                      |                      | 33                   | 61                   | 29                   |                      |                      |                      |                      |                      |                   | 10       |
|                                               |                    |                    |                     |                      |                      | 2                    | 74                   | 88                   | 89                   |                      |                      |                      |                      |                      |                   | 11       |
|                                               |                    |                    |                     |                      | 5                    | 68                   | 89                   | 105                  |                      |                      |                      |                      |                      |                      |                   | 12       |
|                                               |                    |                    |                     | 3                    | 77                   | 52                   | 25                   |                      |                      |                      |                      |                      |                      |                      |                   | 13       |
|                                               |                    |                    |                     | 2                    | 80                   | 37                   | 22                   |                      |                      |                      |                      |                      |                      |                      |                   | 14       |
|                                               |                    |                    |                     |                      | 70                   | 48                   | 18                   |                      |                      |                      |                      |                      |                      |                      |                   | 15       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     | 3                    | 103                  | 147                  | 349                  | 208                  | 81                   |                      |                      |                      |                      |                      |                   | 16       |
|                                               |                    |                    |                     | 2                    | 104                  | 144                  | 317                  | 168                  | 61                   |                      |                      |                      |                      |                      |                   | 17       |
|                                               |                    |                    |                     | 2                    | 104                  | 146                  | 386                  | 211                  | 190                  |                      |                      |                      |                      |                      |                   | 18       |
|                                               |                    |                    |                     |                      | 99                   | 176                  | 323                  | 223                  | 208                  |                      |                      |                      |                      |                      |                   | 19       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      | 2                    | 20                   | 10                   | 4                    |                      |                      |                      |                      |                      |                      |                   | 20       |
|                                               |                    |                    |                     |                      | 16                   | 3                    | 14                   | 3                    |                      |                      |                      |                      |                      |                      |                   | 21       |
|                                               |                    |                    |                     |                      |                      | 7                    | 3                    | 8                    | 82                   | 15                   | 4                    |                      |                      |                      |                   | 22       |
|                                               |                    |                    |                     |                      |                      | 7                    | 4                    | 11                   | 92                   | 8                    | 17                   | 2                    |                      |                      |                   | 23       |
|                                               |                    |                    |                     |                      |                      | 1                    | 5                    | 48                   | 98                   | 19                   | 5                    |                      |                      |                      |                   | 24       |
|                                               |                    |                    |                     |                      |                      | 1                    | 13                   | 38                   | 95                   | 19                   | 11                   |                      |                      |                      |                   | 25       |
|                                               |                    |                    |                     |                      | 16                   | 21                   | 12                   | 5                    | 7                    |                      |                      |                      |                      |                      |                   | 26       |
|                                               |                    |                    |                     |                      | 20                   | 23                   | 13                   | 4                    | 5                    |                      |                      |                      |                      |                      |                   | 27       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      | 18                   | 49                   | 30                   | 61                   | 191                  | 34                   | 9                    |                      |                      |                      |                   | 28       |
|                                               |                    |                    |                     |                      | 36                   | 34                   | 44                   | 53                   | 195                  | 27                   | 28                   | 2                    |                      |                      |                   | 29       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      | 6                    | 24                   | 95                   | 14                   | 61                   | 43                   | 6                    |                      | 2                    | 2                    |                   | 30       |
|                                               |                    |                    |                     |                      | 6                    | 32                   | 65                   | 16                   | 106                  | 61                   | 6                    |                      | 1                    | 2                    |                   | 31       |
|                                               |                    |                    |                     |                      |                      | 4                    | 32                   | 72                   | 142                  | 34                   | 11                   | 3                    |                      |                      |                   | 32       |
|                                               |                    |                    |                     |                      |                      | 3                    | 46                   | 91                   | 182                  | 37                   | 18                   | 3                    |                      |                      |                   | 33       |
|                                               |                    |                    |                     |                      |                      |                      | 64                   | 88                   | 115                  | 15                   | 21                   | 6                    |                      |                      |                   | 34       |
|                                               |                    |                    |                     |                      |                      |                      | 17                   | 55                   | 87                   | 12                   | 17                   | 4                    | 1                    | 1                    |                   | 35       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      | 3                    | 51                   | 69                   | 26                   | 10                   | 16                   | 25                   | 3                    | 3                    |                      |                   | 36       |
|                                               |                    |                    |                     | 2                    | 59                   | 55                   | 32                   | 11                   | 17                   | 18                   | 22                   | 3                    | 3                    |                      |                   | 37       |
|                                               |                    |                    |                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                   |          |
|                                               |                    |                    |                     |                      | 3                    | 57                   | 97                   | 217                  | 184                  | 337                  | 63                   | 12                   | 6                    | 3                    |                   | 38       |
|                                               |                    |                    |                     | 2                    | 65                   | 90                   | 160                  | 173                  | 392                  | 128                  | 63                   | 12                   | 6                    | 2                    |                   | 39       |

## SHEET MILLS.<sup>1</sup>

### SUMMARY.

The average rate of wages or earnings per hour of sheet-mill employees in 1915 was 7 per cent lower than in 1914, 6 per cent lower than in 1913, and 2 per cent lower than in 1912, but it was 1 per cent higher than in 1911 and 10 per cent higher than in 1910. The average full-time weekly earnings have followed very nearly the same course, as full-time hours per week have been unchanged since 1912 and were only 1 per cent lower in 1915 than in 1910. These facts are shown in the table of relative numbers, for "All occupations" (Table 39).

The most significant facts appearing in this chapter concerning wages and hours of labor of sheet-mill employees for the years 1910 to 1915 are summarized by means of averages and percentages in the following table. The facts for 1915 are reported for 5,736 men, and were obtained from 15 plants having 142 hot mills and capable of producing 38 per cent of the total tonnage of all sheet mills in the United States. Of the 5,736 employees, 3,940 were in the 14 principal productive occupations and the remaining 1,796 are in the unclassified productive and nonproductive groups reported for the years 1914 and 1915 only. These 15 plants roll ordinary commercial black sheets, gauges 12 to 30, and mills are not included which roll extra heavy sheets or thin plates. Some sheet mills occasionally roll black plates for tinning, but when so utilized they are classified in this report as tin-plate mills.

In this table occupations are grouped according to the wages paid, beginning with the lowest-paid group, and the occupations in each group are presented in alphabetical order. Classified full-time hours per week and rates of wages per hour are shown by percentages which were computed from the actual figures given in Table Q.

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<sup>1</sup> Summary figures relating to this department are given with figures for other departments of the iron and steel industry on pages 7 to 26; an account of the volume of employment in this and other departments from July, 1913, to June, 1915, is given on pages 26 to 55; and an explanation of the scope of the investigation and of the methods employed is given on pages 55 to 59.

TABLE 38.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, BY OCCUPATIONS, 1910 TO 1915—SHEET MILLS.

[The figures for each group of years are for identical plants.]

| Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                       |       |                       |              | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                   | Average full-time weekly earnings. |
|-----------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|-----------------------|-------|-----------------------|--------------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|-------------------|------------------------------------|
|                                   |       |                      |                                   | 48 and under.                                              | Over 48 and under 60. | 60    | Over 60 and under 72. | 72 and over. |                                 | 14 and under 16 cts.                                | 16 and under 18 cts. | 18 and under 20 cts. | 20 and under 25 cts. | 25 cts. and over. |                                    |
|                                   |       |                      |                                   |                                                            |                       |       |                       |              |                                 |                                                     |                      |                      |                      |                   |                                    |
| Laborers:                         |       |                      |                                   |                                                            |                       |       |                       |              |                                 |                                                     |                      |                      |                      |                   |                                    |
| 9 plants.....                     | 1910  | 347                  | 63.1                              | .....                                                      | 4                     | 64    | 13                    | 19           | \$0.164                         | 21                                                  | 79                   | .....                | .....                | .....             | \$10.35                            |
|                                   | 1911  | 361                  | 63.6                              | .....                                                      | 5                     | 53    | 25                    | 17           | .166                            | 18                                                  | 82                   | .....                | .....                | .....             | 10.54                              |
|                                   | 1912  | 354                  | 63.5                              | .....                                                      | 4                     | 54    | 26                    | 16           | .169                            | 1                                                   | 99                   | .....                | .....                | .....             | 10.72                              |
| 8 plants.....                     | 1912  | 238                  | 63.8                              | .....                                                      | 5                     | 55    | 15                    | 24           | .168                            | 1                                                   | 99                   | .....                | .....                | .....             | 10.76                              |
|                                   | 1913  | 260                  | 65.0                              | .....                                                      | 8                     | 42    | 18                    | 32           | .191                            | 13                                                  | 83                   | 4                    | .....                | .....             | 12.39                              |
| 13 plants.....                    | 1913  | 351                  | 64.9                              | .....                                                      | 17                    | 37    | 13                    | 33           | .190                            | 21                                                  | 76                   | 3                    | .....                | .....             | 12.28                              |
|                                   | 1914  | 286                  | 65.9                              | .....                                                      | 13                    | 21    | 36                    | 29           | .190                            | 21                                                  | 78                   | 1                    | .....                | .....             | 12.46                              |
| 15 plants.....                    | 1914  | 378                  | 65.9                              | .....                                                      | 10                    | 26    | 32                    | 31           | .188                            | 25                                                  | 70                   | 6                    | .....                | .....             | 12.37                              |
|                                   | 1915  | 394                  | 65.0                              | .....                                                      | 10                    | 32    | 30                    | 27           | .188                            | 24                                                  | 73                   | 3                    | .....                | .....             | 12.21                              |
| Picklers:                         |       |                      |                                   |                                                            |                       |       |                       |              |                                 |                                                     |                      |                      |                      |                   |                                    |
| 4 plants.....                     | 1910  | 50                   | 70.8                              | .....                                                      | .....                 | 10    | .....                 | 90           | .181                            | 56                                                  | 28                   | 16                   | .....                | .....             | 12.75                              |
|                                   | 1911  | 49                   | 71.8                              | .....                                                      | .....                 | 10    | .....                 | 90           | .172                            | 78                                                  | 8                    | 14                   | .....                | .....             | 12.35                              |
| 5 plants.....                     | 1911  | 58                   | 71.2                              | .....                                                      | .....                 | 9     | 16                    | 76           | .177                            | 66                                                  | 7                    | 28                   | .....                | .....             | 12.54                              |
|                                   | 1912  | 39                   | 71.7                              | .....                                                      | .....                 | 13    | 15                    | 72           | .186                            | 51                                                  | 15                   | 33                   | .....                | .....             | 12.23                              |
| 4 plants.....                     | 1912  | 33                   | 72.4                              | .....                                                      | .....                 | 15    | .....                 | 85           | .183                            | 61                                                  | 18                   | 21                   | .....                | .....             | 13.17                              |
|                                   | 1913  | 30                   | 70.0                              | .....                                                      | .....                 | 17    | .....                 | 83           | .202                            | 57                                                  | .....                | 20                   | 23                   | .....             | 14.06                              |
| 8 plants.....                     | 1913  | 71                   | 68.1                              | 11                                                         | .....                 | 7     | 8                     | 73           | .216                            | 27                                                  | 1                    | 51                   | 21                   | .....             | 14.49                              |
|                                   | 1914  | 71                   | 68.2                              | 11                                                         | .....                 | 7     | 6                     | 76           | .215                            | 31                                                  | .....                | 48                   | 21                   | .....             | 14.40                              |
| 9 plants.....                     | 1914  | 121                  | 69.6                              | 7                                                          | .....                 | 4     | 8                     | 81           | .211                            | 18                                                  | .....                | 69                   | 12                   | .....             | 14.55                              |
|                                   | 1915  | 126                  | 69.8                              | 6                                                          | .....                 | 3     | 6                     | 84           | .209                            | 24                                                  | .....                | 62                   | 14                   | .....             | 14.44                              |
| Unclassified—productive:          |       |                      |                                   |                                                            |                       |       |                       |              |                                 |                                                     |                      |                      |                      |                   |                                    |
| 13 plants.....                    | 1914  | 1,445                | 66.5                              | 6                                                          | 7                     | 21    | 24                    | 41           | .212                            | (1)                                                 | 12                   | 35                   | 38                   | 16                | 14.05                              |
|                                   | 1915  | 1,207                | 66.0                              | 6                                                          | 4                     | 27    | 27                    | 36           | .211                            | (1)                                                 | 17                   | 29                   | 37                   | 17                | 13.88                              |
| Unclassified—nonproductive:       |       |                      |                                   |                                                            |                       |       |                       |              |                                 |                                                     |                      |                      |                      |                   |                                    |
| 13 plants.....                    | 1914  | 514                  | 69.2                              | .....                                                      | 2                     | 17    | 33                    | 48           | .208                            | (1)                                                 | 9                    | 55                   | 25                   | 10                | 14.41                              |
|                                   | 1915  | 589                  | 68.6                              | .....                                                      | (1)                   | 17    | 42                    | 40           | .207                            | 1                                                   | 13                   | 55                   | 20                   | 11                | 14.25                              |
|                                   |       |                      |                                   |                                                            |                       |       |                       |              |                                 | Under 25 cts.                                       | 25 and under 30 cts. | 30 and under 40 cts. | 40 and under 50 cts. | 50 cts. and over. |                                    |
| Openers:                          |       |                      |                                   |                                                            |                       |       |                       |              |                                 |                                                     |                      |                      |                      |                   |                                    |
| 7 plants.....                     | 1910  | 138                  | 46.0                              | 86                                                         | .....                 | ..... | 14                    | .....        | .274                            | 1                                                   | 88                   | 4                    | 7                    | .....             | 12.57                              |
|                                   | 1911  | 167                  | 45.2                              | 89                                                         | .....                 | ..... | 11                    | .....        | .275                            | 1                                                   | 86                   | 2                    | 1                    | 11                | 12.35                              |
|                                   | 1912  | 180                  | 45.8                              | 87                                                         | .....                 | ..... | 13                    | .....        | .289                            | 37                                                  | 39                   | 12                   | 4                    | 8                 | 13.04                              |
| 6 plants.....                     | 1912  | 170                  | 46.0                              | 86                                                         | .....                 | ..... | 14                    | .....        | .274                            | 39                                                  | 41                   | 13                   | 5                    | 2                 | 12.43                              |
|                                   | 1913  | 168                  | 45.4                              | 88                                                         | .....                 | ..... | 12                    | .....        | .279                            | 6                                                   | 82                   | 12                   | .....                | .....             | 12.56                              |
| 7 plants.....                     | 1913  | 161                  | 42.8                              | 100                                                        | .....                 | ..... | .....                 | .....        | .291                            | 11                                                  | 57                   | 31                   | 1                    | .....             | 12.45                              |
|                                   | 1914  | 159                  | 42.8                              | 100                                                        | .....                 | ..... | .....                 | .....        | .282                            | 16                                                  | 62                   | 22                   | .....                | .....             | 12.09                              |
| 9 plants.....                     | 1914  | 200                  | 42.8                              | 100                                                        | .....                 | ..... | .....                 | .....        | .282                            | 17                                                  | 56                   | 28                   | .....                | .....             | 12.06                              |
|                                   | 1915  | 180                  | 43.6                              | 96                                                         | 2                     | ..... | 2                     | .....        | .273                            | 22                                                  | 45                   | 32                   | 1                    | .....             | 11.93                              |
| Shearmen's helpers:               |       |                      |                                   |                                                            |                       |       |                       |              |                                 |                                                     |                      |                      |                      |                   |                                    |
| 6 plants.....                     | 1910  | 62                   | 46.4                              | 84                                                         | .....                 | 16    | .....                 | .....        | .261                            | 42                                                  | 53                   | 2                    | 3                    | .....             | 11.99                              |
|                                   | 1911  | 83                   | 44.9                              | 90                                                         | .....                 | 10    | .....                 | .....        | .308                            | 31                                                  | 34                   | 22                   | 1                    | 12                | 13.59                              |
|                                   | 1912  | 77                   | 45.1                              | 90                                                         | .....                 | 10    | .....                 | .....        | .290                            | 26                                                  | 42                   | 20                   | 13                   | .....             | 12.88                              |
| 5 plants.....                     | 1912  | 67                   | 45.5                              | 88                                                         | .....                 | 12    | .....                 | .....        | .267                            | 30                                                  | 48                   | 22                   | .....                | .....             | 11.97                              |
|                                   | 1913  | 70                   | 45.3                              | 89                                                         | .....                 | 11    | .....                 | .....        | .267                            | 54                                                  | 16                   | 29                   | 1                    | .....             | 11.93                              |
| 7 plants.....                     | 1913  | 111                  | 42.9                              | 100                                                        | .....                 | ..... | .....                 | .....        | .251                            | 46                                                  | 37                   | 17                   | .....                | .....             | 10.77                              |
|                                   | 1914  | 91                   | 43.0                              | 100                                                        | .....                 | ..... | .....                 | .....        | .290                            | 24                                                  | 34                   | 36                   | 5                    | .....             | 12.45                              |
| 9 plants.....                     | 1914  | 128                  | 42.9                              | 100                                                        | .....                 | ..... | .....                 | .....        | .282                            | 32                                                  | 28                   | 36                   | 4                    | .....             | 12.09                              |
|                                   | 1915  | 146                  | 43.8                              | 95                                                         | 2                     | ..... | 3                     | .....        | .242                            | 56                                                  | 26                   | 18                   | .....                | .....             | 10.59                              |

1 Less than one-half of 1 per cent.

# 408 WAGES AND HOURS OF LABOR—IRON AND STEEL INDUSTRY.

TABLE 38.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, BY OCCUPATIONS, 1910 TO 1915—*SHEET MILLS*—Contd.

| Occupation, and number of plants.     | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                       |    |                       |              | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                   | Average full-time weekly earnings. |
|---------------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|-----------------------|----|-----------------------|--------------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|-------------------|------------------------------------|
|                                       |       |                      |                                   | 48 and under.                                              | Over 48 and under 60. | 60 | Over 60 and under 72. | 72 and over. |                                 | Under 30 cts.                                       | 30 and under 40 cts. | 40 and under 50 cts. | 50 and under 60 cts. | 60 cts. and over. |                                    |
| <b>Doublers:</b>                      |       |                      |                                   |                                                            |                       |    |                       |              |                                 |                                                     |                      |                      |                      |                   |                                    |
| 9 plants.....                         | 1910  | 210                  | 42.7                              | 100                                                        |                       |    |                       |              | \$0.372                         | 11                                                  | 50                   | 40                   |                      |                   | \$15.86                            |
|                                       | 1911  | 252                  | 42.7                              | 100                                                        |                       |    |                       |              | .401                            | 4                                                   | 48                   | 40                   | 8                    |                   | 17.10                              |
|                                       | 1912  | 246                  | 42.7                              | 100                                                        |                       |    |                       |              | .412                            | 2                                                   | 31                   | 62                   | 6                    |                   | 17.58                              |
| 8 plants.....                         | 1912  | 216                  | 42.7                              | 100                                                        |                       |    |                       |              | .423                            | 2                                                   | 21                   | 71                   | 7                    |                   | 18.06                              |
|                                       | 1913  | 222                  | 42.7                              | 100                                                        |                       |    |                       |              | .450                            | 1                                                   | 18                   | 64                   | 16                   | 1                 | 19.21                              |
| 13 plants.....                        | 1913  | 336                  | 42.8                              | 100                                                        |                       |    |                       |              | .429                            | 2                                                   | 32                   | 49                   | 16                   |                   | 18.34                              |
|                                       | 1914  | 333                  | 42.8                              | 100                                                        |                       |    |                       |              | .459                            | 4                                                   | 19                   | 43                   | 31                   | 3                 | 19.66                              |
| 15 plants.....                        | 1914  | 399                  | 42.8                              | 100                                                        |                       |    |                       |              | .462                            | 3                                                   | 16                   | 48                   | 30                   | 3                 | 19.75                              |
|                                       | 1915  | 354                  | 42.8                              | 100                                                        |                       |    |                       |              | .453                            | 1                                                   | 19                   | 57                   | 21                   | 4                 | 19.42                              |
| <b>Matchers:</b>                      |       |                      |                                   |                                                            |                       |    |                       |              |                                 |                                                     |                      |                      |                      |                   |                                    |
| 9 plants.....                         | 1910  | 210                  | 42.7                              | 100                                                        |                       |    |                       |              | .387                            | 11                                                  | 38                   | 52                   |                      |                   | 16.53                              |
|                                       | 1911  | 255                  | 42.7                              | 100                                                        |                       |    |                       |              | .418                            | 6                                                   | 43                   | 33                   | 18                   |                   | 17.83                              |
|                                       | 1912  | 249                  | 42.7                              | 100                                                        |                       |    |                       |              | .429                            | 3                                                   | 25                   | 61                   | 11                   |                   | 18.30                              |
| 8 plants.....                         | 1912  | 219                  | 42.7                              | 100                                                        |                       |    |                       |              | .439                            | 3                                                   | 15                   | 69                   | 13                   |                   | 18.75                              |
|                                       | 1913  | 219                  | 42.7                              | 100                                                        |                       |    |                       |              | .462                            | 1                                                   | 15                   | 60                   | 23                   | 1                 | 19.72                              |
| 13 plants.....                        | 1913  | 336                  | 42.8                              | 100                                                        |                       |    |                       |              | .448                            | 2                                                   | 27                   | 45                   | 25                   | 1                 | 19.16                              |
|                                       | 1914  | 333                  | 42.8                              | 100                                                        |                       |    |                       |              | .480                            | 4                                                   | 16                   | 35                   | 39                   | 6                 | 20.56                              |
| 15 plants.....                        | 1914  | 399                  | 42.8                              | 100                                                        |                       |    |                       |              | .484                            | 3                                                   | 13                   | 39                   | 39                   | 7                 | 20.70                              |
|                                       | 1915  | 354                  | 42.8                              | 100                                                        |                       |    |                       |              | .475                            | 1                                                   | 17                   | 42                   | 34                   | 6                 | 24.30                              |
| <b>Rollers' helpers or finishers:</b> |       |                      |                                   |                                                            |                       |    |                       |              |                                 |                                                     |                      |                      |                      |                   |                                    |
| 6 plants.....                         | 1912  | 115                  | 42.7                              | 100                                                        |                       |    |                       |              | .474                            |                                                     | 49                   |                      | 30                   | 22                | 20.21                              |
|                                       | 1913  | 139                  | 42.7                              | 100                                                        |                       |    |                       |              | .517                            |                                                     | 43                   | 5                    | 23                   | 29                | 22.05                              |
| 8 plants.....                         | 1913  | 171                  | 42.7                              | 100                                                        |                       |    |                       |              | .503                            |                                                     | 32                   | 27                   | 17                   | 24                | 21.48                              |
|                                       | 1914  | 187                  | 42.7                              | 100                                                        |                       |    |                       |              | .573                            | 1                                                   | 31                   | 34                   | 10                   | 25                | 24.46                              |
| 10 plants.....                        | 1914  | 264                  | 42.9                              | 100                                                        |                       |    |                       |              | .555                            |                                                     | 33                   | 28                   | 11                   | 28                | 23.77                              |
|                                       | 1915  | 233                  | 42.9                              | 100                                                        |                       |    |                       |              | .461                            |                                                     | 33                   | 49                   | 4                    | 13                | 19.77                              |
| <b>Sheet heaters' helpers:</b>        |       |                      |                                   |                                                            |                       |    |                       |              |                                 |                                                     |                      |                      |                      |                   |                                    |
| 8 plants.....                         | 1910  | 174                  | 42.7                              | 100                                                        |                       |    |                       |              | .377                            | 5                                                   | 56                   | 36                   | 2                    |                   | 16.07                              |
|                                       | 1911  | 215                  | 42.7                              | 100                                                        |                       |    |                       |              | .436                            |                                                     | 34                   | 42                   | 24                   | 1                 | 18.59                              |
|                                       | 1912  | 208                  | 42.7                              | 100                                                        |                       |    |                       |              | .439                            |                                                     | 33                   | 47                   | 19                   | 1                 | 18.71                              |
| 7 plants.....                         | 1912  | 178                  | 42.7                              | 100                                                        |                       |    |                       |              | .439                            |                                                     | 38                   | 38                   | 23                   | 1                 | 18.74                              |
|                                       | 1913  | 178                  | 42.7                              | 100                                                        |                       |    |                       |              | .511                            |                                                     | 15                   | 34                   | 35                   | 16                | 21.81                              |
| 10 plants.....                        | 1913  | 230                  | 42.9                              | 100                                                        |                       |    |                       |              | .483                            |                                                     | 22                   | 34                   | 33                   | 12                | 20.70                              |
|                                       | 1914  | 230                  | 42.9                              | 100                                                        |                       |    |                       |              | .494                            |                                                     | 20                   | 31                   | 33                   | 15                | 21.16                              |
| 13 plants.....                        | 1914  | 309                  | 42.8                              | 100                                                        |                       |    |                       |              | .485                            | 1                                                   | 19                   | 39                   | 29                   | 12                | 20.73                              |
|                                       | 1915  | 275                  | 42.9                              | 100                                                        |                       |    |                       |              | .458                            |                                                     | 20                   | 61                   | 12                   | 7                 | 19.60                              |
| <b>Catchers:</b>                      |       |                      |                                   |                                                            |                       |    |                       |              |                                 |                                                     |                      |                      |                      |                   |                                    |
| 9 plants.....                         | 1910  | 215                  | 42.7                              | 100                                                        |                       |    |                       |              | .544                            | 9                                                   | 19                   | 38                   | 34                   |                   | 23.19                              |
|                                       | 1911  | 258                  | 42.7                              | 100                                                        |                       |    |                       |              | .587                            | 5                                                   | 13                   | 45                   | 18                   | 20                | 25.03                              |
|                                       | 1912  | 252                  | 42.7                              | 100                                                        |                       |    |                       |              | .603                            | 2                                                   | 19                   | 16                   | 52                   | 12                | 25.71                              |
| 8 plants.....                         | 1912  | 222                  | 42.7                              | 100                                                        |                       |    |                       |              | .617                            | 2                                                   | 8                    | 18                   | 59                   | 14                | 26.33                              |
|                                       | 1913  | 222                  | 42.7                              | 100                                                        |                       |    |                       |              | .652                            | 1                                                   | 5                    | 15                   | 51                   | 28                | 27.84                              |
| 13 plants.....                        | 1913  | 336                  | 42.8                              | 100                                                        |                       |    |                       |              | .629                            | 1                                                   | 11                   | 26                   | 35                   | 27                | 26.92                              |
|                                       | 1914  | 333                  | 42.8                              | 100                                                        |                       |    |                       |              | .629                            | 3                                                   | 10                   | 23                   | 40                   | 24                | 26.93                              |
| 15 plants.....                        | 1914  | 399                  | 42.8                              | 100                                                        |                       |    |                       |              | .636                            | 2                                                   | 8                    | 21                   | 43                   | 26                | 27.23                              |
|                                       | 1915  | 350                  | 42.8                              | 100                                                        |                       |    |                       |              | .595                            | 1                                                   | 11                   | 43                   | 32                   | 13                | 25.49                              |

TABLE 38.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, BY OCCUPATIONS, 1910 TO 1915—SHEET MILLS—Concl'd.

| Occupation, and number of plants.             | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |                 |              | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                   | Average full-time weekly earnings. |
|-----------------------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|----------------------|-----------------|--------------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|-------------------|------------------------------------|
|                                               |       |                      |                                   | 48 and under.                                              | Over 48 and under 60 | 60 and under 72 | 72 and over. |                                 | Under 40 cts.                                       | 40 and under 50 cts. | 50 and under 60 cts. | 60 and under 70 cts. | 70 cts. and over. |                                    |
| Pair heaters:<br>9 plants.....                | 1910  | 210                  | 42.7                              | 100                                                        |                      |                 |              | \$0.466                         | 20                                                  | 30                   | 49                   | 1                    |                   | \$19.89                            |
|                                               | 1911  | 255                  | 42.7                              | 100                                                        |                      |                 |              | .502                            | 16                                                  | 38                   | 27                   | 18                   | 1                 | 21.42                              |
|                                               | 1912  | 249                  | 42.7                              | 100                                                        |                      |                 |              | .517                            | 6                                                   | 23                   | 58                   | 14                   |                   | 22.06                              |
| 8 plants.....                                 | 1912  | 219                  | 42.7                              | 100                                                        |                      |                 |              | .532                            | 6                                                   | 12                   | 66                   | 16                   |                   | 22.69                              |
|                                               | 1913  | 219                  | 42.7                              | 100                                                        |                      |                 |              | .558                            | 5                                                   | 7                    | 58                   | 27                   | 2                 | 23.79                              |
| 13 plants.....                                | 1913  | 336                  | 42.8                              | 100                                                        |                      |                 |              | .543                            | 7                                                   | 20                   | 48                   | 24                   | 1                 | 23.23                              |
|                                               | 1914  | 333                  | 42.8                              | 100                                                        |                      |                 |              | .537                            | 8                                                   | 21                   | 48                   | 22                   | 2                 | 22.99                              |
| 15 plants.....                                | 1914  | 399                  | 42.8                              | 100                                                        |                      |                 |              | .540                            | 7                                                   | 19                   | 51                   | 22                   | 1                 | 23.10                              |
|                                               | 1915  | 354                  | 42.8                              | 100                                                        |                      |                 |              | .518                            | 3                                                   | 41                   | 46                   | 9                    | 1                 | 22.17                              |
| Rollers:<br>9 plants.....                     | 1910  | 215                  | 42.7                              | 100                                                        |                      |                 |              | 1.242                           |                                                     | 2                    | 2                    | 4                    | 92                | 52.98                              |
|                                               | 1911  | 259                  | 42.7                              | 100                                                        |                      |                 |              | 1.380                           |                                                     |                      |                      | (1)                  | 100               | 58.99                              |
|                                               | 1912  | 252                  | 42.7                              | 100                                                        |                      |                 |              | 1.416                           |                                                     |                      |                      |                      | 100               | 60.41                              |
| 8 plants.....                                 | 1912  | 222                  | 42.7                              | 100                                                        |                      |                 |              | 1.437                           |                                                     |                      |                      |                      | 100               | 61.31                              |
|                                               | 1913  | 222                  | 42.7                              | 100                                                        |                      |                 |              | 1.455                           |                                                     |                      |                      |                      | 100               | 62.08                              |
| 13 plants.....                                | 1913  | 335                  | 42.8                              | 100                                                        |                      |                 |              | 1.476                           |                                                     |                      |                      |                      | 100               | 63.21                              |
|                                               | 1914  | 332                  | 42.8                              | 100                                                        |                      |                 |              | 1.439                           |                                                     |                      |                      |                      | 100               | 61.58                              |
| 15 plants.....                                | 1914  | 394                  | 42.8                              | 100                                                        |                      |                 |              | 1.431                           |                                                     |                      |                      |                      | 100               | 61.20                              |
|                                               | 1915  | 348                  | 42.9                              | 100                                                        |                      |                 |              | 1.289                           |                                                     |                      |                      | (1)                  | 100               | 54.80                              |
| Roughers:<br>9 plants.....                    | 1910  | 215                  | 42.7                              | 100                                                        |                      |                 |              | .558                            | 6                                                   | 16                   | 39                   | 39                   |                   | 23.82                              |
|                                               | 1911  | 255                  | 42.7                              | 100                                                        |                      |                 |              | .603                            |                                                     | 6                    | 57                   | 18                   | 20                | 25.71                              |
|                                               | 1912  | 252                  | 42.7                              | 100                                                        |                      |                 |              | .616                            |                                                     | 17                   | 17                   | 51                   | 16                | 26.29                              |
| 8 plants.....                                 | 1912  | 222                  | 42.7                              | 100                                                        |                      |                 |              | .633                            |                                                     | 5                    | 19                   | 58                   | 18                | 26.99                              |
|                                               | 1913  | 222                  | 42.7                              | 100                                                        |                      |                 |              | .666                            |                                                     | 1                    | 16                   | 50                   | 33                | 28.40                              |
| 13 plants.....                                | 1913  | 336                  | 42.8                              | 100                                                        |                      |                 |              | .642                            | 1                                                   | 9                    | 26                   | 31                   | 33                | 27.49                              |
|                                               | 1914  | 333                  | 42.8                              | 100                                                        |                      |                 |              | .644                            | 1                                                   | 9                    | 21                   | 39                   | 29                | 27.54                              |
| 15 plants.....                                | 1914  | 399                  | 42.8                              | 100                                                        |                      |                 |              | .648                            | 1                                                   | 8                    | 19                   | 43                   | 30                | 27.73                              |
|                                               | 1915  | 353                  | 42.8                              | 100                                                        |                      |                 |              | .619                            |                                                     | 7                    | 36                   | 40                   | 17                | 26.51                              |
| Shearmen:<br>7 plants.....                    | 1910  | 85                   | 46.0                              | 86                                                         |                      | 14              |              | .689                            | 13                                                  | 7                    | 15                   | 11                   | 54                | 30.79                              |
|                                               | 1911  | 104                  | 44.9                              | 90                                                         |                      | 10              |              | .722                            | 8                                                   | 6                    | 29                   | 9                    | 49                | 32.86                              |
|                                               | 1912  | 105                  | 44.9                              | 90                                                         |                      | 10              |              | .768                            | 3                                                   | 6                    | 6                    | 9                    | 77                | 34.67                              |
| 6 plants.....                                 | 1912  | 95                   | 45.1                              | 89                                                         |                      | 11              |              | .757                            | 3                                                   | 6                    | 6                    | 10                   | 75                | 34.42                              |
|                                               | 1913  | 93                   | 45.2                              | 89                                                         |                      | 11              |              | .801                            | 3                                                   | 1                    | 7                    | 24                   | 66                | 36.34                              |
| 8 plants.....                                 | 1913  | 114                  | 42.9                              | 100                                                        |                      |                 |              | .814                            | 1                                                   | 2                    | 10                   | 18                   | 69                | 34.90                              |
|                                               | 1914  | 114                  | 42.9                              | 100                                                        |                      |                 |              | .836                            | 3                                                   | 1                    | 11                   | 9                    | 76                | 35.84                              |
| 10 plants.....                                | 1914  | 136                  | 42.9                              | 100                                                        |                      |                 |              | .860                            | 2                                                   | 1                    | 7                    | 10                   | 80                | 36.84                              |
|                                               | 1915  | 115                  | 43.0                              | 100                                                        |                      |                 |              | .827                            |                                                     | 3                    | 2                    | 23                   | 72                | 35.48                              |
| Sheet heaters:<br>9 plants.....               | 1910  | 215                  | 42.7                              | 100                                                        |                      |                 |              | .883                            |                                                     |                      | 4                    | 11                   | 85                | 37.68                              |
|                                               | 1911  | 259                  | 42.7                              | 100                                                        |                      |                 |              | .911                            |                                                     |                      |                      | 15                   | 85                | 38.88                              |
|                                               | 1912  | 253                  | 42.7                              | 100                                                        |                      |                 |              | .949                            |                                                     |                      | (1)                  | 14                   | 85                | 40.51                              |
| 8 plants.....                                 | 1912  | 223                  | 42.7                              | 100                                                        |                      |                 |              | .989                            |                                                     |                      | (1)                  | 3                    | 97                | 42.21                              |
|                                               | 1913  | 223                  | 42.7                              | 100                                                        |                      |                 |              | .998                            |                                                     |                      |                      | 4                    | 96                | 42.60                              |
| 12 plants.....                                | 1913  | 307                  | 42.8                              | 100                                                        |                      |                 |              | .993                            |                                                     |                      | (1)                  | 5                    | 95                | 42.50                              |
|                                               | 1914  | 301                  | 42.9                              | 100                                                        |                      |                 |              | .963                            |                                                     |                      | 1                    | 3                    | 96                | 41.24                              |
| 14 plants.....                                | 1914  | 364                  | 42.8                              | 100                                                        |                      |                 |              | .966                            |                                                     |                      | 1                    | 3                    | 96                | 41.34                              |
|                                               | 1915  | 324                  | 42.9                              | 100                                                        |                      |                 |              | .868                            |                                                     |                      | 1                    | 11                   | 88                | 37.19                              |
| Sheet heaters, level-handed:<br>2 plants..... | 1913  | 14                   | 42.7                              | 100                                                        |                      |                 |              | .707                            |                                                     |                      |                      | 43                   | 57                | 30.17                              |
|                                               | 1914  | 10                   | 42.7                              | 100                                                        |                      |                 |              | .673                            |                                                     |                      |                      | 60                   | 40                | 28.72                              |
| 2 plants.....                                 | 1914  | 56                   | 42.7                              | 100                                                        |                      |                 |              | .762                            |                                                     |                      |                      | 14                   | 86                | 32.65                              |
|                                               | 1915  | 34                   | 42.7                              | 100                                                        |                      |                 |              | .686                            |                                                     |                      | 18                   | 35                   | 47                | 29.27                              |

<sup>1</sup> Less than one-half of 1 per cent.

Referring to the first occupation shown in Table 38, laborers, comparison can be made of data from 9 identical plants for 1910, 1911, and 1912, 8 plants for 1912 and 1913, 13 plants for 1913 and 1914, and 15 plants for 1914 and 1915. In 1915 the 15 plants from which reports were obtained employed 394 laborers whose average full-time hours of work were 65 per week. Ten per cent of the 394 laborers worked over 48 and under 60 hours per week, 32 per cent worked 60 hours, 30 per cent worked over 60 and under 72 hours, and 27 per cent worked 72 hours and over per week. The average rate of wages or earnings per hour of the 394 laborers in 1915 was 18.8 cents, 24 per cent having earned 16 and under 18 cents, 73 per cent 18 and under 20 cents, and 3 per cent 20 and under 25 cents per hour. The average full-time weekly earnings were \$12.21.

The average full-time weekly earnings of sheet-mill employees in 1915 ranged from \$10.59 for shearmen's helpers to \$54.80 for rollers.

#### INDEX NUMBERS.

Owing to changes in the number of plants reported from year to year, and the consequent differences in the averages for the overlapping year in two groups, it is difficult to make a comparison of the actual data over a period of several years which will give an accurate measure of the changes throughout the period. To aid in making such a comparison, relative or index numbers have been computed from the averages given in Table 38 for full-time hours per week, rates of wages per hour, and full-time weekly earnings, for each occupation, and for the department as a whole as determined by a combination of the data for the several occupations, from 1910 to 1915. Such figures appear in Table 39.

These relative or index numbers are simply percentages for which the data for 1915 are taken as the base, or 100 per cent. The relative for each year is the per cent which the average for that year is of the average for 1915. For example, the relative full-time weekly earnings of pair heaters in 1910 were 91 as compared with 100 in 1915, that is, the full-time weekly earnings of pair heaters in 1910 were 91 per cent of the full-time weekly earnings in this occupation in 1915. The method of computing relative numbers is explained on pages 65 to 67.

Table 39 also shows for each occupation the per cent of increase or decrease in full-time hours per week, rates of wages per hour, and full-time weekly earnings in 1915, as compared with each specified year preceding. These percentages of increase and decrease are computed from the relative numbers. Thus the full-time weekly earnings of pair heaters in 1915 were 10 per cent higher than in 1910, 2 per cent higher than in 1911, the same as in 1912, 5 per cent lower than in 1913, and 4 per cent lower than in 1914.

In other columns of the table is shown the per cent of change in each year as compared with the year immediately preceding. Thus the full-time weekly earnings of pair heaters in 1911 were 8 per cent higher than in 1910, in 1912 2 per cent higher than in 1911, in 1913 5 per cent higher than in 1912, in 1914 1 per cent lower than in 1913, and in 1915 4 per cent lower than in 1914. The other occupations and items of the table can be studied in like manner. The percentages of increase and decrease are computed from the relative numbers.

The figures for the department as a whole appear at the end of the table.

TABLE 39.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATION—SHEET MILLS.

| Occupation and year.                  | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|---------------------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                                       | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in— |                                                      |
|                                       |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| <b>Pair heaters:</b>                  |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                             | 100                                | (1)                                          |                                                      | 91                               | +10                                          |                                                      | 91                                  | +10                                          |                                                      |
| 1911.....                             | 100                                | (1)                                          | (1)                                                  | 98                               | +2                                           | +8                                                   | 98                                  | +2                                           | +8                                                   |
| 1912.....                             | 100                                | (1)                                          | (1)                                                  | 100                              | (1)                                          | +2                                                   | 100                                 | (1)                                          | +2                                                   |
| 1913.....                             | 100                                | (1)                                          | (1)                                                  | 105                              | -5                                           | +5                                                   | 105                                 | -5                                           | +5                                                   |
| 1914.....                             | 100                                | (1)                                          | (1)                                                  | 104                              | -4                                           | -1                                                   | 104                                 | -4                                           | -1                                                   |
| 1915.....                             | 100                                |                                              | (1)                                                  | 100                              |                                              | -4                                                   | 100                                 |                                              | -4                                                   |
| <b>Rollers:</b>                       |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                             | 100                                | (1)                                          |                                                      | 99                               | +1                                           |                                                      | 99                                  | +1                                           |                                                      |
| 1911.....                             | 100                                | (1)                                          | (1)                                                  | 111                              | -10                                          | +12                                                  | 110                                 | -9                                           | +11                                                  |
| 1912.....                             | 100                                | (1)                                          | (1)                                                  | 113                              | -12                                          | +2                                                   | 113                                 | -12                                          | +3                                                   |
| 1913.....                             | 100                                | (1)                                          | (1)                                                  | 115                              | -13                                          | +2                                                   | 115                                 | -13                                          | +2                                                   |
| 1914.....                             | 100                                | (1)                                          | (1)                                                  | 112                              | -11                                          | -3                                                   | 112                                 | -11                                          | -3                                                   |
| 1915.....                             | 100                                |                                              | (1)                                                  | 100                              |                                              | -11                                                  | 100                                 |                                              | -11                                                  |
| <b>Rollers' helpers or finishers:</b> |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                             |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1911.....                             |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1912.....                             | 100                                | (1)                                          |                                                      | 97                               | +3                                           |                                                      | 97                                  | +3                                           |                                                      |
| 1913.....                             | 100                                | (1)                                          | (1)                                                  | 106                              | -6                                           | +9                                                   | 106                                 | -6                                           | +9                                                   |
| 1914.....                             | 100                                | (1)                                          | (1)                                                  | 120                              | -17                                          | +13                                                  | 120                                 | -17                                          | +13                                                  |
| 1915.....                             | 100                                |                                              | (1)                                                  | 100                              |                                              | -17                                                  | 100                                 |                                              | -17                                                  |
| <b>Roughers:</b>                      |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                             | 100                                | (1)                                          |                                                      | 90                               | +11                                          |                                                      | 90                                  | +11                                          |                                                      |
| 1911.....                             | 100                                | (1)                                          | (1)                                                  | 97                               | +3                                           | +8                                                   | 97                                  | +3                                           | +8                                                   |
| 1912.....                             | 100                                | (1)                                          | (1)                                                  | 99                               | +1                                           | +2                                                   | 99                                  | +1                                           | +2                                                   |
| 1913.....                             | 100                                | (1)                                          | (1)                                                  | 104                              | -4                                           | +5                                                   | 104                                 | -4                                           | +5                                                   |
| 1914.....                             | 100                                | (1)                                          | (1)                                                  | 105                              | -5                                           | +1                                                   | 105                                 | -5                                           | +1                                                   |
| 1915.....                             | 100                                |                                              | (1)                                                  | 100                              |                                              | -5                                                   | 100                                 |                                              | -5                                                   |
| <b>Catchers:</b>                      |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                             | 100                                | (1)                                          |                                                      | 91                               | +10                                          |                                                      | 91                                  | +10                                          |                                                      |
| 1911.....                             | 100                                | (1)                                          | (1)                                                  | 98                               | +2                                           | +8                                                   | 98                                  | +2                                           | +8                                                   |
| 1912.....                             | 100                                | (1)                                          | (1)                                                  | 101                              | -1                                           | +3                                                   | 101                                 | -1                                           | +3                                                   |
| 1913.....                             | 100                                | (1)                                          | (1)                                                  | 107                              | -7                                           | +6                                                   | 107                                 | -7                                           | +6                                                   |
| 1914.....                             | 100                                | (1)                                          | (1)                                                  | 107                              | -7                                           | (1)                                                  | 107                                 | -7                                           | (1)                                                  |
| 1915.....                             | 100                                |                                              | (1)                                                  | 100                              |                                              | -7                                                   | 100                                 |                                              | -7                                                   |

<sup>1</sup> No change.

TABLE 39.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATION—SHEET MILLS—Continued.

| Occupation and year.                | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|-------------------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                                     | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in— |                                                      |
|                                     |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| <b>Matchers:</b>                    |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                           | 100                                | (1)                                          | —                                                    | 82                               | +22                                          | —                                                    | 82                                  | +22                                          | —                                                    |
| 1911.....                           | 100                                | (1)                                          | (1)                                                  | 88                               | +14                                          | +7                                                   | 88                                  | +14                                          | +7                                                   |
| 1912.....                           | 100                                | (1)                                          | (1)                                                  | 90                               | +11                                          | +2                                                   | 90                                  | +11                                          | +2                                                   |
| 1913.....                           | 100                                | (1)                                          | (1)                                                  | 95                               | +5                                           | +6                                                   | 95                                  | +5                                           | +6                                                   |
| 1914.....                           | 100                                | (1)                                          | (1)                                                  | 102                              | —2                                           | +7                                                   | 102                                 | —2                                           | +7                                                   |
| 1915.....                           | 100                                | (1)                                          | (1)                                                  | 100                              | —                                            | —2                                                   | 100                                 | —                                            | —2                                                   |
| <b>Doublers:</b>                    |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                           | 100                                | (1)                                          | —                                                    | 81                               | +23                                          | —                                                    | 81                                  | +23                                          | —                                                    |
| 1911.....                           | 100                                | (1)                                          | (1)                                                  | 87                               | +15                                          | +7                                                   | 87                                  | +15                                          | +7                                                   |
| 1912.....                           | 100                                | (1)                                          | (1)                                                  | 90                               | +11                                          | +3                                                   | 89                                  | +12                                          | +2                                                   |
| 1913.....                           | 100                                | (1)                                          | (1)                                                  | 95                               | +5                                           | +6                                                   | 95                                  | +5                                           | +7                                                   |
| 1914.....                           | 100                                | (1)                                          | (1)                                                  | 102                              | —2                                           | +7                                                   | 102                                 | —2                                           | +7                                                   |
| 1915.....                           | 100                                | (1)                                          | (1)                                                  | 100                              | —                                            | —2                                                   | 100                                 | —                                            | —2                                                   |
| <b>Sheet heaters:</b>               |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                           | 100                                | (1)                                          | —                                                    | 106                              | —6                                           | —                                                    | 106                                 | —6                                           | —                                                    |
| 1911.....                           | 100                                | (1)                                          | (1)                                                  | 109                              | —8                                           | +3                                                   | 109                                 | —8                                           | +3                                                   |
| 1912.....                           | 100                                | (1)                                          | (1)                                                  | 114                              | —12                                          | +5                                                   | 114                                 | —12                                          | +5                                                   |
| 1913.....                           | 100                                | (1)                                          | (1)                                                  | 115                              | —13                                          | +1                                                   | 115                                 | —13                                          | +1                                                   |
| 1914.....                           | 100                                | (1)                                          | (1)                                                  | 111                              | —10                                          | —3                                                   | 111                                 | —10                                          | —3                                                   |
| 1915.....                           | 100                                | (1)                                          | (1)                                                  | 100                              | —                                            | —10                                                  | 100                                 | —                                            | —10                                                  |
| <b>Sheet heaters, level-handed:</b> |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                           |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1911.....                           |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1912.....                           |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1913.....                           | 100                                | (1)                                          | —                                                    | 117                              | —15                                          | —                                                    | 117                                 | —15                                          | —                                                    |
| 1914.....                           | 100                                | (1)                                          | (1)                                                  | 111                              | —10                                          | —5                                                   | 112                                 | —11                                          | —4                                                   |
| 1915.....                           | 100                                | (1)                                          | (1)                                                  | 100                              | —                                            | —10                                                  | 100                                 | —                                            | —11                                                  |
| <b>Sheet heaters' helpers:</b>      |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                           | 100                                | (1)                                          | —                                                    | 77                               | +30                                          | —                                                    | 78                                  | +32                                          | —                                                    |
| 1911.....                           | 100                                | (1)                                          | (1)                                                  | 88                               | +14                                          | +14                                                  | 88                                  | +14                                          | +16                                                  |
| 1912.....                           | 100                                | (1)                                          | (1)                                                  | 89                               | +12                                          | +1                                                   | 89                                  | +12                                          | +1                                                   |
| 1913.....                           | 100                                | (1)                                          | (1)                                                  | 104                              | —4                                           | +17                                                  | 104                                 | —4                                           | +17                                                  |
| 1914.....                           | 100                                | (1)                                          | (1)                                                  | 106                              | —6                                           | +2                                                   | 106                                 | —6                                           | +2                                                   |
| 1915.....                           | 100                                | (1)                                          | (1)                                                  | 100                              | —                                            | —6                                                   | 100                                 | —                                            | —6                                                   |
| <b>Shearmen:</b>                    |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                           | 102                                | —2                                           | —                                                    | 86                               | +16                                          | —                                                    | 85                                  | +18                                          | —                                                    |
| 1911.....                           | 100                                | (1)                                          | —2                                                   | 90                               | +11                                          | +5                                                   | 91                                  | +10                                          | +7                                                   |
| 1912.....                           | 100                                | (1)                                          | (1)                                                  | 96                               | +4                                           | +7                                                   | 96                                  | +4                                           | +5                                                   |
| 1913.....                           | 100                                | (1)                                          | (1)                                                  | 101                              | —1                                           | +5                                                   | 101                                 | —1                                           | +5                                                   |
| 1914.....                           | 100                                | (1)                                          | (1)                                                  | 104                              | —4                                           | +3                                                   | 104                                 | —4                                           | +3                                                   |
| 1915.....                           | 100                                | (1)                                          | (1)                                                  | 100                              | —                                            | —4                                                   | 100                                 | —                                            | —4                                                   |
| <b>Shearmen's helpers:</b>          |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                           | 101                                | —1                                           | —                                                    | 91                               | +10                                          | —                                                    | 92                                  | +9                                           | —                                                    |
| 1911.....                           | 98                                 | +2                                           | —3                                                   | 107                              | —7                                           | +18                                                  | 105                                 | —5                                           | +14                                                  |
| 1912.....                           | 98                                 | +2                                           | (1)                                                  | 101                              | —1                                           | (1)                                                  | 99                                  | +1                                           | —6                                                   |
| 1913.....                           | 98                                 | +2                                           | (1)                                                  | 101                              | —1                                           | (1)                                                  | 99                                  | +1                                           | (1)                                                  |
| 1914.....                           | 98                                 | +2                                           | (1)                                                  | 117                              | —15                                          | +16                                                  | 114                                 | —12                                          | +15                                                  |
| 1915.....                           | 100                                | —                                            | +2                                                   | 100                              | —                                            | —15                                                  | 100                                 | —                                            | —12                                                  |
| <b>Openers:</b>                     |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                           | 100                                | (1)                                          | —                                                    | 99                               | +1                                           | —                                                    | 99                                  | +1                                           | —                                                    |
| 1911.....                           | 98                                 | +2                                           | —2                                                   | 100                              | (1)                                          | +1                                                   | 98                                  | +2                                           | —1                                                   |
| 1912.....                           | 100                                | (1)                                          | +2                                                   | 105                              | —5                                           | +5                                                   | 103                                 | —3                                           | +5                                                   |
| 1913.....                           | 98                                 | +2                                           | —2                                                   | 107                              | —7                                           | +2                                                   | 104                                 | —4                                           | +1                                                   |
| 1914.....                           | 98                                 | +2                                           | (1)                                                  | 103                              | —3                                           | —4                                                   | 101                                 | —1                                           | —3                                                   |
| 1915.....                           | 100                                | —                                            | +2                                                   | 100                              | —                                            | —3                                                   | 100                                 | —                                            | —1                                                   |

1 No change.



TABLE 39.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATION—*SHEET MILLS*—Concluded.

| Occupation and year.               | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|------------------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                                    | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in— |                                                      |
|                                    |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| <b>Picklers:</b>                   |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                          | 101                                | -1                                           |                                                      | 92                               | +9                                           |                                                      | 93                                  | +8                                           |                                                      |
| 1911.....                          | 102                                | -2                                           | +1                                                   | 88                               | +14                                          | -4                                                   | 90                                  | +11                                          | -3                                                   |
| 1912.....                          | 103                                | -3                                           | +1                                                   | 92                               | +9                                           | +5                                                   | 95                                  | +5                                           | +6                                                   |
| 1913.....                          | 100                                | ( <sup>1</sup> )                             | -3                                                   | 102                              | -2                                           | +11                                                  | 101                                 | -1                                           | +6                                                   |
| 1914.....                          | 100                                | ( <sup>1</sup> )                             | ( <sup>1</sup> )                                     | 101                              | -1                                           | -1                                                   | 101                                 | -1                                           | ( <sup>1</sup> )                                     |
| 1915.....                          | 100                                |                                              | ( <sup>1</sup> )                                     | 100                              |                                              | -1                                                   | 100                                 |                                              | -1                                                   |
| <b>Laborers:</b>                   |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                          | 98                                 | +2                                           |                                                      | 85                               | +18                                          |                                                      | 84                                  | +19                                          |                                                      |
| 1911.....                          | 98                                 | +2                                           | ( <sup>1</sup> )                                     | 86                               | +16                                          | +1                                                   | 85                                  | +18                                          | +1                                                   |
| 1912.....                          | 98                                 | +2                                           | ( <sup>1</sup> )                                     | 88                               | +14                                          | +2                                                   | 87                                  | +15                                          | +2                                                   |
| 1913.....                          | 100                                | ( <sup>1</sup> )                             | +2                                                   | 100                              | ( <sup>1</sup> )                             | +14                                                  | 100                                 | ( <sup>1</sup> )                             | +15                                                  |
| 1914.....                          | 101                                | -1                                           | +1                                                   | 100                              | ( <sup>1</sup> )                             | ( <sup>1</sup> )                                     | 101                                 | -1                                           | +1                                                   |
| 1915.....                          | 100                                |                                              | -1                                                   | 100                              |                                              | ( <sup>1</sup> )                                     | 100                                 |                                              | -1                                                   |
| <b>Unclassified—productive:</b>    |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1914.....                          | 101                                | -1                                           |                                                      | 101                              | -1                                           |                                                      | 101                                 | -1                                           |                                                      |
| 1915.....                          | 100                                |                                              | -1                                                   | 100                              |                                              | -1                                                   | 100                                 |                                              | -1                                                   |
| <b>Unclassified—nonproductive:</b> |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1914.....                          | 101                                | -1                                           |                                                      | 101                              | -1                                           |                                                      | 101                                 | -1                                           |                                                      |
| 1915.....                          | 100                                |                                              | -1                                                   | 100                              |                                              | -1                                                   | 100                                 |                                              | -1                                                   |
| <b>All occupations:</b>            |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                          | 101                                | -1                                           |                                                      | 91                               | +10                                          |                                                      | 91                                  | +10                                          |                                                      |
| 1911.....                          | 99                                 | +1                                           | -2                                                   | 99                               | +1                                           | +9                                                   | 98                                  | +2                                           | +8                                                   |
| 1912.....                          | 100                                | ( <sup>1</sup> )                             | +1                                                   | 102                              | -2                                           | +3                                                   | 101                                 | -1                                           | +3                                                   |
| 1913.....                          | 100                                | ( <sup>1</sup> )                             | ( <sup>1</sup> )                                     | 106                              | -6                                           | +4                                                   | 105                                 | -5                                           | +4                                                   |
| 1914.....                          | 100                                | ( <sup>1</sup> )                             | ( <sup>1</sup> )                                     | 108                              | -7                                           | +2                                                   | 108                                 | -7                                           | +3                                                   |
| 1915.....                          | 100                                |                                              | ( <sup>1</sup> )                                     | 100                              |                                              | -7                                                   | 100                                 |                                              | -7                                                   |

<sup>1</sup> No change.

The relative full-time weekly earnings for all occupations combined in 1910 was 91, as compared with 100 in 1915. The relative increased to 98 in 1911, to 101 in 1912, to 105 in 1913, and to 108 in 1914, but in 1915 there was a drop of 7 per cent, the relative being 100. These relative numbers for each year previous to 1914 are based on the principal productive occupations only, while those for 1914 and 1915 include the unclassified groups (see pages 55 and 56) tabulated for 1914 and 1915 for the first time.

#### FULL-TIME WORKING DAYS PER WEEK.

The number and per cent of employees in the principal productive occupations in sheet-mill plants whose customary working time per week was 5 days or turns, or 6 days, or 7 days, or variations thereof, are shown in Table 40. It will be noticed that the customary working time of a large number of the employees in this department was "5 days, 5 days, and 6 days in rotation." In all except one of the plants covered, the hot-mill employees were divided into three groups, each working 8 hours per turn, five turns per week, Monday to Friday, inclusive, with one crew working one turn Saturday morning. In the one plant excepted two turns were worked on Saturday. Each crew advances one turn each week, thus giving each crew the extra Saturday turns in rotation.

Two sets of figures are shown for the 15 plants reported for 1914 and 1915, the first covering only the principal productive occupations as shown for all the preceding groups of years, and therefore strictly comparable with them, and the second including the unclassified occupations (see pp. 55 and 56) tabulated for 1914 and 1915 for the first time. The inclusion of these occupations makes a greater change in this table for sheet mills and in that for tin-plate mills as well than for any other departments, owing to the general custom of sheet and tin-plate hot-mill employees in the principal productive occupations of working three turns per day, 5 or 6 days per week, as stated above, while employees in the unclassified occupations, being largely mechanics or laborers, work 6 days to a large extent.

TABLE 40.—NUMBER AND PER CENT OF EMPLOYEES WORKING EACH SPECIFIED NUMBER OF DAYS PER WEEK, BY YEARS, 1910 TO 1915—*SHEET MILLS*.

[The figures for each group of years are for identical plants.]

## NUMBER.

| Number of plants.                 | Year. | Number of employees. | Employees whose customary working time per week was— |                                 |                                         |                                         |         |                                |         |
|-----------------------------------|-------|----------------------|------------------------------------------------------|---------------------------------|-----------------------------------------|-----------------------------------------|---------|--------------------------------|---------|
|                                   |       |                      | 5 days.                                              | 5 days, and 6 days alternately. | 5 days, 5 days, and 6 days in rotation. | 5 days, 6 days, and 6 days in rotation. | 6 days. | 6 days and 7 days alternately. | 7 days. |
| Pittsburgh:                       |       |                      |                                                      |                                 |                                         |                                         |         |                                |         |
| 9 plants.....                     | 1910  | 2,346                | 2                                                    | 46                              | 1,907                                   | .....                                   | 380     | .....                          | 11      |
|                                   | 1911  | 2,772                | 2                                                    | 40                              | 2,326                                   | .....                                   | 391     | .....                          | 13      |
| 9 plants.....                     | 1911  | 2,781                | 2                                                    | 40                              | 2,326                                   | .....                                   | 400     | .....                          | 13      |
|                                   | 1912  | 2,716                | 2                                                    | 46                              | 2,281                                   | .....                                   | 370     | 4                              | 13      |
| 8 plants.....                     | 1912  | 2,439                | 2                                                    | 46                              | 2,126                                   | .....                                   | 248     | 4                              | 13      |
|                                   | 1913  | 2,487                | 2                                                    | 42                              | 2,159                                   | .....                                   | 276     | .....                          | 8       |
| 9 plants.....                     | 1913  | 2,455                | 2                                                    | 10                              | 2,155                                   | .....                                   | 278     | .....                          | 10      |
|                                   | 1914  | 2,422                | 2                                                    | 8                               | 2,177                                   | .....                                   | 210     | .....                          | 25      |
| 10 plants, principal occupations. | 1914  | 2,824                | .....                                                | 10                              | 2,521                                   | .....                                   | 268     | .....                          | 25      |
|                                   | 1915  | 2,532                | 2                                                    | 48                              | 2,179                                   | .....                                   | 266     | .....                          | 37      |
| 10 plants, all occupations        | 1914  | 4,150                | 3                                                    | 110                             | 2,521                                   | .....                                   | 1,282   | .....                          | 234     |
|                                   | 1915  | 3,808                | 20                                                   | 144                             | 2,179                                   | .....                                   | 1,208   | 20                             | 237     |
| Great Lakes and Middle West:      |       |                      |                                                      |                                 |                                         |                                         |         |                                |         |
| 4 plants.....                     | 1913  | 1,090                | 34                                                   | .....                           | 732                                     | 195                                     | 107     | 17                             | 5       |
|                                   | 1914  | 1,024                | 2                                                    | .....                           | 710                                     | 195                                     | 113     | 2                              | 2       |
| 5 plants.....                     | 1914  | 1,521                | 2                                                    | .....                           | 1,102                                   | 216                                     | 197     | 2                              | 2       |
|                                   | 1915  | 1,408                | 2                                                    | .....                           | 966                                     | 252                                     | 186     | 2                              | .....   |
| 5 plants.....                     | 1914  | 2,154                | 12                                                   | 9                               | 1,144                                   | 216                                     | 705     | 57                             | 11      |
|                                   | 1915  | 1,928                | 12                                                   | 6                               | 994                                     | 252                                     | 625     | 31                             | 8       |
| Total:                            |       |                      |                                                      |                                 |                                         |                                         |         |                                |         |
| 9 plants.....                     | 1910  | 2,346                | 2                                                    | 46                              | 1,907                                   | .....                                   | 380     | .....                          | 11      |
|                                   | 1911  | 2,772                | 2                                                    | 40                              | 2,326                                   | .....                                   | 391     | .....                          | 13      |
| 9 plants.....                     | 1911  | 2,781                | 2                                                    | 40                              | 2,326                                   | .....                                   | 400     | .....                          | 13      |
|                                   | 1912  | 2,716                | 2                                                    | 46                              | 2,281                                   | .....                                   | 370     | 4                              | 13      |
| 8 plants.....                     | 1912  | 2,439                | 2                                                    | 46                              | 2,126                                   | .....                                   | 248     | 4                              | 13      |
|                                   | 1913  | 2,487                | 2                                                    | 42                              | 2,159                                   | .....                                   | 276     | .....                          | 8       |
| 13 plants.....                    | 1913  | 3,545                | 36                                                   | 10                              | 2,887                                   | 195                                     | 385     | 17                             | 15      |
|                                   | 1914  | 3,446                | 4                                                    | 8                               | 2,887                                   | 195                                     | 323     | 2                              | 27      |
| 15 plants.....                    | 1914  | 4,345                | 2                                                    | 10                              | 3,623                                   | 216                                     | 465     | 2                              | 27      |
|                                   | 1915  | 3,940                | 4                                                    | 48                              | 3,145                                   | 252                                     | 452     | 2                              | 37      |
| 15 plants.....                    | 1914  | 6,304                | 15                                                   | 119                             | 3,665                                   | 216                                     | 1,987   | 57                             | 245     |
|                                   | 1915  | 5,736                | 32                                                   | 150                             | 3,173                                   | 252                                     | 1,833   | 51                             | 245     |

TABLE 40.—NUMBER AND PER CENT OF EMPLOYEES WORKING EACH SPECIFIED NUMBER OF DAYS PER WEEK, BY YEARS, 1910 TO 1915—*SHEET MILLS*—Concluded.

## PER CENT.

| Number of plants.                 | Year. | Number of employees. | Employees whose customary working time per week was— |                                |                                         |                                         |         |                                |         |
|-----------------------------------|-------|----------------------|------------------------------------------------------|--------------------------------|-----------------------------------------|-----------------------------------------|---------|--------------------------------|---------|
|                                   |       |                      | 5 days.                                              | 5 days and 6 days alternately. | 5 days, 5 days, and 6 days in rotation. | 5 days, 6 days, and 6 days in rotation. | 6 days. | 6 days and 7 days alternately. | 7 days. |
| Pittsburgh:                       |       |                      |                                                      |                                |                                         |                                         |         |                                |         |
| 9 plants.....                     | 1910  | 2,346                | (1)                                                  | 2                              | 81                                      | .....                                   | 16      | .....                          | 1       |
|                                   | 1911  | 2,772                | (1)                                                  | 1                              | 84                                      | .....                                   | 14      | .....                          | 1       |
| 9 plants.....                     | 1911  | 2,781                | (1)                                                  | 1                              | 84                                      | .....                                   | 14      | (1)                            | 1       |
|                                   | 1912  | 2,716                | (1)                                                  | 2                              | 84                                      | .....                                   | 14      | .....                          | 1       |
| 8 plants.....                     | 1912  | 2,439                | (1)                                                  | 2                              | 87                                      | .....                                   | 10      | (1)                            | 1       |
|                                   | 1913  | 2,487                | (1)                                                  | 2                              | 87                                      | .....                                   | 11      | .....                          | (1)     |
| 9 plants.....                     | 1913  | 2,455                | (1)                                                  | (1)                            | 88                                      | .....                                   | 11      | .....                          | (1)     |
|                                   | 1914  | 2,422                | (1)                                                  | (1)                            | 90                                      | .....                                   | 9       | .....                          | 1       |
| 10 plants, principal occupations. | 1914  | 2,824                | .....                                                | (1)                            | 89                                      | .....                                   | 9       | .....                          | 1       |
|                                   | 1915  | 2,532                | (1)                                                  | 2                              | 86                                      | .....                                   | 11      | .....                          | 1       |
| 10 plants, all occupations ..     | 1914  | 4,150                | (1)                                                  | 3                              | 61                                      | .....                                   | 31      | .....                          | 6       |
|                                   | 1915  | 3,808                | 1                                                    | 4                              | 57                                      | .....                                   | 32      | 1                              | 6       |
| Great Lakes and Middle West:      |       |                      |                                                      |                                |                                         |                                         |         |                                |         |
| 4 plants.....                     | 1913  | 1,090                | 3                                                    | .....                          | 67                                      | 18                                      | 10      | 2                              | (1)     |
|                                   | 1914  | 1,024                | (1)                                                  | .....                          | 69                                      | 19                                      | 11      | (1)                            | (1)     |
| 5 plants.....                     | 1914  | 1,521                | (1)                                                  | .....                          | 72                                      | 14                                      | 13      | (1)                            | (1)     |
|                                   | 1915  | 1,408                | (1)                                                  | .....                          | 69                                      | 18                                      | 13      | (1)                            | .....   |
| 5 plants.....                     | 1914  | 2,154                | 1                                                    | (1)                            | 53                                      | 10                                      | 33      | 3                              | 1       |
|                                   | 1915  | 1,928                | 1                                                    | (1)                            | 52                                      | 13                                      | 32      | 2                              | (1)     |
| Total:                            |       |                      |                                                      |                                |                                         |                                         |         |                                |         |
| 9 plants.....                     | 1910  | 2,346                | (1)                                                  | 2                              | 81                                      | .....                                   | 16      | .....                          | 1       |
|                                   | 1911  | 2,772                | (1)                                                  | 1                              | 84                                      | .....                                   | 14      | .....                          | 1       |
| 9 plants.....                     | 1911  | 2,781                | (1)                                                  | 1                              | 84                                      | .....                                   | 14      | .....                          | 1       |
|                                   | 1912  | 2,716                | (1)                                                  | 2                              | 84                                      | .....                                   | 14      | (1)                            | 1       |
| 8 plants.....                     | 1912  | 2,439                | (1)                                                  | 2                              | 87                                      | .....                                   | 10      | (1)                            | 1       |
|                                   | 1913  | 2,487                | (1)                                                  | 2                              | 87                                      | .....                                   | 11      | .....                          | (1)     |
| 13 plants.....                    | 1913  | 3,545                | 1                                                    | (1)                            | 81                                      | 6                                       | 11      | (1)                            | (1)     |
|                                   | 1914  | 3,446                | (1)                                                  | (1)                            | 84                                      | 6                                       | 9       | (1)                            | 1       |
| 15 plants.....                    | 1914  | 4,345                | (1)                                                  | (1)                            | 83                                      | 5                                       | 11      | (1)                            | 1       |
|                                   | 1915  | 3,940                | (1)                                                  | 1                              | 80                                      | 6                                       | 11      | (1)                            | 1       |
| 15 plants.....                    | 1914  | 6,304                | (1)                                                  | 2                              | 58                                      | 3                                       | 32      | 1                              | 4       |
|                                   | 1915  | 5,736                | 1                                                    | 3                              | 55                                      | 4                                       | 32      | 1                              | 4       |

1 Less than one-half of 1 per cent.

It was a custom years ago for rolling-mill companies to pay the roller a lump sum per ton of rolled product, and for the roller to furnish and pay the necessary rolling crew, the company not being concerned with the wages of the individual men. This custom had objectionable features, and as a whole has nearly disappeared, although to a limited extent it continues, in that a company may pay one man for a specified part of the rolling process, while two men are necessary all or a part of the time to the successful performance of the duties of the occupation. In such a case the company-paid man hires a helper on whatever terms he is able to make. This custom has frequently been found in sheet and tin-plate mills in the past, the company paying one man for each specific position (occupation) in the rolling crew, leaving the matter of spell hands or helpers to be settled by the men on their own terms. However, most companies now consider it advisable to carry all men working in their mills on their own pay rolls in order that they may know just who is employed in the plants and what rates are paid. Reports for 1914 and 1915 show a marked increase in the number of sheet-mill companies paying each individual workman directly, their pay rolls thus showing the frequency with which helpers were employed and their pay. Where information in former years was somewhat indefinite as regards helpers, it is now possible to obtain facts. These facts somewhat disturb data previously shown for certain occupations, although changes in methods of work have made it necessary to some extent to employ helpers where formerly they were not required.

In one plant in particular, when the company, in 1915, began paying each individual employee it developed that pair heaters, matchers, and doublers employed helpers intermittently. These helpers received from 75 cents to \$2 per turn, or occasionally worked "level-handed" with the head man. This company in previous years had reported that in their belief helpers were *seldom* employed, and the average rate per hour for their occupations was computed from gross earnings without any deductions for helpers. Further, no deduction was possible, as the pay to helpers could not be ascertained. This company is of the impression that some changes in methods of work in 1915, and perhaps more frequent rolling of heavier product, accounted to a large degree for the additional number of helpers employed. It is thought to be fairer to this plant to continue to compute the average rates per hour from the gross earnings of each occupation, and to this extent the figures represent the pay for the operation rather than the wage of an individual. In order to illustrate the exact condition existing in this plant, Table 41 has been prepared, showing for six crews the gross earnings of pair heaters in the pay

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period reported, the last half of May, 1915, the hours worked, the number of turns when a helper was employed and his rate, the average cost per hour of the pair-heating job, and the net earnings per hour of the pair heater himself.

TABLE 41.—GROSS AND NET EARNINGS OF 6 PAIR HEATERS IN A CERTAIN SHEET-MILL PLANT, MAY, 1915, SHOWING IRREGULARITY OF EMPLOYMENT OF HELPERS.

[A sheet-mill turn is 8 hours in length.]

| Crew number. | Pair heaters. |                 |                   | Pair heaters' helpers. |                | Pair heaters. |                   |
|--------------|---------------|-----------------|-------------------|------------------------|----------------|---------------|-------------------|
|              | Hours worked. | Gross earnings. |                   | Turns made.            | Rate per turn. | Net earnings. |                   |
|              |               | Amount.         | Average per hour. |                        |                | Amount.       | Average per hour. |
| 1.....       | 48            | \$25.19         | \$0.546           | .....                  | .....          | \$26.19       | \$0.546           |
| 2.....       | 64            | 32.01           | .500              | 4                      | \$2.00         | 24.01         | .375              |
| 3.....       | 64            | 33.25           | .520              | 7                      | 1.00           | 26.25         | .410              |
| 4.....       | 56            | 30.22           | .540              | Level-handed.          |                | 15.11         | .270              |
| 5.....       | 64            | 34.60           | .541              | 4                      | 1.25           | 29.60         | .463              |
| 6.....       | 56            | 27.40           | .489              | 2                      | 1.00           | 17.90         | .320              |
|              |               |                 |                   | 1                      | 1.50           |               |                   |
|              |               |                 |                   | 3                      | 2.00           |               |                   |

Matchers and doublers in this plant employed helpers with like irregularity, and the average rates per hour used in the tables of this report were computed on the gross earnings of the job. In a considerable number of plants catchers are assisted by "2d catchers" or helpers, who are paid by the company or by the catcher, or by both, but for this occupation satisfactory information has always been obtained, and catchers' hourly rates have been computed on their net earnings.

In both sheet mills and tin-plate mills the custom of two heaters working level-handed (dividing the pay evenly), instead of one heater working with a helper, has been increasing in recent years. Beginning with 1913, in both these departments a new group—"heaters, level-handed"—is included in this report; in previous years the scattering level-handed work was shown with that of the regular heaters.

Two general tables are presented for this department, as follows:

Table Q.—Full-time hours per week, rates of wages per hour, and full-time weekly earnings, in the United States, by years, 1910 to 1915.

Table R.—Full-time hours per week, rates of wages per hour, and full-time weekly earnings, in each district, by years, 1913 to 1915.

The data from Table Q are summarized in Table 38, percentages being used instead of the actual figures for classified hours and rates of wages.

The order in which the occupations are given in Tables Q and R and the table of relative numbers follows that of the processes of

. manufacture. "Identical plants," as used in the tables of this report, are identical units of identical establishments reporting the same occupations in each of two or more consecutive years. For a more extended explanation, see page 58.

Descriptions of the occupations which are specified in the tables of this chapter and of other occupations of the sheet-mill department included in the two groups designated as: "Unclassified—productive," and "Unclassified—nonproductive," are to be found in the Glossary of Occupations, pages 519 to 523.

TABLE Q.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1910 TO 1915—

[The figures for each group of

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Pair heaters:                     |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 2        | 9 plants.....                     | 1910  | 210                  | 42.7                              | \$0.466                         | \$19.83                            | 210                                            |                      |                 |    |                      |    |                      |    |
| 3        |                                   | 1911  | 255                  | 42.7                              | .502                            | 21.42                              | 255                                            |                      |                 |    |                      |    |                      |    |
|          |                                   | 1912  | 249                  | 42.7                              | .517                            | 22.06                              | 249                                            |                      |                 |    |                      |    |                      |    |
| 4        | 8 plants.....                     | 1912  | 219                  | 42.7                              | .532                            | 22.69                              | 219                                            |                      |                 |    |                      |    |                      |    |
| 5        |                                   | 1913  | 219                  | 42.7                              | .558                            | 23.79                              | 219                                            |                      |                 |    |                      |    |                      |    |
| 6        | 13 plants.....                    | 1913  | 336                  | 42.8                              | .543                            | 23.23                              | 336                                            |                      |                 |    |                      |    |                      |    |
| 7        |                                   | 1914  | 333                  | 42.8                              | .537                            | 22.99                              | 333                                            |                      |                 |    |                      |    |                      |    |
| 8        | 15 plants.....                    | 1914  | 399                  | 42.8                              | .540                            | 23.10                              | 399                                            |                      |                 |    |                      |    |                      |    |
| 9        |                                   | 1915  | 354                  | 42.8                              | .518                            | 22.17                              | 354                                            |                      |                 |    |                      |    |                      |    |
| 10       | Rollers:                          |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 11       | 9 plants.....                     | 1910  | 215                  | 42.7                              | 1.242                           | 52.98                              | 215                                            |                      |                 |    |                      |    |                      |    |
| 12       |                                   | 1911  | 259                  | 42.7                              | 1.380                           | 58.89                              | 259                                            |                      |                 |    |                      |    |                      |    |
|          |                                   | 1912  | 252                  | 42.7                              | 1.416                           | 60.41                              | 252                                            |                      |                 |    |                      |    |                      |    |
| 13       | 8 plants.....                     | 1912  | 222                  | 42.7                              | 1.437                           | 61.31                              | 222                                            |                      |                 |    |                      |    |                      |    |
| 14       |                                   | 1913  | 222                  | 42.7                              | 1.455                           | 62.08                              | 222                                            |                      |                 |    |                      |    |                      |    |
| 15       | 13 plants.....                    | 1913  | 335                  | 42.8                              | 1.476                           | 63.21                              | 335                                            |                      |                 |    |                      |    |                      |    |
| 16       |                                   | 1914  | 332                  | 42.8                              | 1.439                           | 61.58                              | 332                                            |                      |                 |    |                      |    |                      |    |
| 17       | 15 plants.....                    | 1914  | 394                  | 42.8                              | 1.431                           | 61.20                              | 394                                            |                      |                 |    |                      |    |                      |    |
| 18       |                                   | 1915  | 348                  | 42.9                              | 1.280                           | 54.80                              | 348                                            |                      |                 |    |                      |    |                      |    |
| 19       | Rollers' helpers or finishers:    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 20       | 6 plants.....                     | 1912  | 115                  | 42.7                              | .474                            | 20.21                              | 115                                            |                      |                 |    |                      |    |                      |    |
|          |                                   | 1913  | 139                  | 42.7                              | .517                            | 22.05                              | 139                                            |                      |                 |    |                      |    |                      |    |
| 21       | 8 plants.....                     | 1913  | 171                  | 42.7                              | .503                            | 21.48                              | 171                                            |                      |                 |    |                      |    |                      |    |
| 22       |                                   | 1914  | 187                  | 42.7                              | .573                            | 24.46                              | 187                                            |                      |                 |    |                      |    |                      |    |
| 23       | 10 plants.....                    | 1914  | 264                  | 42.9                              | .555                            | 23.77                              | 264                                            |                      |                 |    |                      |    |                      |    |
| 24       |                                   | 1915  | 233                  | 42.9                              | .461                            | 19.77                              | 233                                            |                      |                 |    |                      |    |                      |    |
| 25       | Roughers:                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 26       | 9 plants.....                     | 1910  | 215                  | 42.7                              | .558                            | 23.82                              | 215                                            |                      |                 |    |                      |    |                      |    |
| 27       |                                   | 1911  | 255                  | 42.7                              | .603                            | 25.71                              | 255                                            |                      |                 |    |                      |    |                      |    |
|          |                                   | 1912  | 252                  | 42.7                              | .616                            | 26.29                              | 252                                            |                      |                 |    |                      |    |                      |    |
| 28       | 8 plants.....                     | 1912  | 222                  | 42.7                              | .633                            | 26.99                              | 222                                            |                      |                 |    |                      |    |                      |    |
| 29       |                                   | 1913  | 222                  | 42.7                              | .666                            | 28.40                              | 222                                            |                      |                 |    |                      |    |                      |    |
| 30       | 13 plants.....                    | 1913  | 336                  | 42.8                              | .642                            | 27.49                              | 336                                            |                      |                 |    |                      |    |                      |    |
| 31       |                                   | 1914  | 333                  | 42.8                              | .644                            | 27.54                              | 333                                            |                      |                 |    |                      |    |                      |    |
| 32       | 15 plants.....                    | 1914  | 399                  | 42.8                              | .648                            | 27.73                              | 399                                            |                      |                 |    |                      |    |                      |    |
| 33       |                                   | 1915  | 353                  | 42.8                              | .619                            | 26.51                              | 353                                            |                      |                 |    |                      |    |                      |    |
| 34       | Catchers:                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 35       | 9 plants.....                     | 1910  | 215                  | 42.7                              | .544                            | 23.19                              | 215                                            |                      |                 |    |                      |    |                      |    |
| 36       |                                   | 1911  | 258                  | 42.7                              | .587                            | 25.03                              | 258                                            |                      |                 |    |                      |    |                      |    |
|          |                                   | 1912  | 252                  | 42.7                              | .603                            | 25.71                              | 252                                            |                      |                 |    |                      |    |                      |    |
| 37       | 8 plants.....                     | 1912  | 222                  | 42.7                              | .617                            | 26.33                              | 222                                            |                      |                 |    |                      |    |                      |    |
| 38       |                                   | 1913  | 222                  | 42.7                              | .652                            | 27.84                              | 222                                            |                      |                 |    |                      |    |                      |    |
| 39       | 13 plants.....                    | 1913  | 336                  | 42.8                              | .629                            | 26.92                              | 336                                            |                      |                 |    |                      |    |                      |    |
| 40       |                                   | 1914  | 333                  | 42.8                              | .629                            | 26.93                              | 333                                            |                      |                 |    |                      |    |                      |    |
| 41       | 15 plants.....                    | 1914  | 399                  | 42.8                              | .636                            | 27.23                              | 399                                            |                      |                 |    |                      |    |                      |    |
| 42       |                                   | 1915  | 350                  | 42.8                              | .595                            | 25.49                              | 350                                            |                      |                 |    |                      |    |                      |    |
| 43       | Matchers:                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 44       | 9 plants.....                     | 1910  | 210                  | 42.7                              | .387                            | 16.53                              | 210                                            |                      |                 |    |                      |    |                      |    |
| 45       |                                   | 1911  | 255                  | 42.7                              | .418                            | 17.83                              | 255                                            |                      |                 |    |                      |    |                      |    |
|          |                                   | 1912  | 249                  | 42.7                              | .429                            | 18.30                              | 249                                            |                      |                 |    |                      |    |                      |    |
| 46       | 8 plants.....                     | 1912  | 219                  | 42.7                              | .439                            | 18.75                              | 219                                            |                      |                 |    |                      |    |                      |    |
| 47       |                                   | 1913  | 219                  | 42.7                              | .462                            | 19.72                              | 219                                            |                      |                 |    |                      |    |                      |    |



AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
SHEET MILLS.

years are for identical plants.]

| Employees whose rates of wages per hour were— |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | Line<br>No. |
|-----------------------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------|-------------|
| 12 and<br>under<br>14<br>cents.               | 14 and<br>under<br>16<br>cents. | 16 and<br>under<br>18<br>cents. | 18 and<br>under<br>20<br>cents. | 20 and<br>under<br>25<br>cents. | 25 and<br>under<br>30<br>cents. | 30 and<br>under<br>40<br>cents. | 40 and<br>under<br>50<br>cents. | 50 and<br>under<br>60<br>cents. | 60 and<br>under<br>70<br>cents. | 70 cents<br>and<br>over. |             |
|                                               |                                 |                                 |                                 | 3                               | 3                               | 37                              | 62                              | 103                             | 2                               |                          | 1           |
|                                               |                                 |                                 |                                 |                                 | 6                               | 34                              | 98                              | 69                              | 45                              | 3                        | 2           |
|                                               |                                 |                                 |                                 |                                 | 2                               | 12                              | 56                              | 144                             | 35                              |                          | 3           |
|                                               |                                 |                                 |                                 |                                 | 2                               | 12                              | 26                              | 144                             | 35                              |                          | 4           |
|                                               |                                 |                                 |                                 |                                 |                                 | 11                              | 16                              | 128                             | 59                              | 5                        | 5           |
|                                               |                                 |                                 |                                 |                                 |                                 | 22                              | 68                              | 161                             | 81                              | 4                        | 6           |
|                                               |                                 |                                 |                                 |                                 | 4                               | 23                              | 70                              | 159                             | 72                              | 5                        | 7           |
|                                               |                                 |                                 |                                 |                                 | 4                               | 23                              | 77                              | 204                             | 86                              | 5                        | 8           |
|                                               |                                 |                                 |                                 |                                 |                                 | 11                              | 146                             | 162                             | 32                              | 3                        | 9           |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 4                               | 5                               | 8                               | 198                      | 10          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 1                               | 258                      | 11          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 252                      | 12          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 222                      | 13          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 222                      | 14          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 335                      | 15          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 332                      | 16          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 394                      | 17          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 1                               | 347                      | 18          |
|                                               |                                 |                                 |                                 |                                 |                                 | 56                              |                                 | 34                              | 25                              |                          | 19          |
|                                               |                                 |                                 |                                 |                                 |                                 | 60                              | 7                               | 32                              | 18                              | 22                       | 20          |
|                                               |                                 |                                 |                                 |                                 |                                 | 54                              | 47                              | 29                              | 19                              | 22                       | 21          |
|                                               |                                 |                                 |                                 | 1                               |                                 | 58                              | 63                              | 19                              | 17                              | 29                       | 22          |
|                                               |                                 |                                 |                                 |                                 |                                 | 88                              | 74                              | 29                              | 41                              | 32                       | 23          |
|                                               |                                 |                                 |                                 |                                 |                                 | 78                              | 115                             | 9                               | 10                              | 21                       | 24          |
|                                               |                                 |                                 |                                 |                                 |                                 | 13                              | 34                              | 84                              | 84                              |                          | 25          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 14                              | 144                             | 45                              | 52                       | 26          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 42                              | 42                              | 129                             | 39                       | 27          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 12                              | 42                              | 129                             | 39                       | 28          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 3                               | 35                              | 111                             | 73                       | 29          |
|                                               |                                 |                                 |                                 |                                 |                                 | 2                               | 29                              | 89                              | 105                             | 111                      | 30          |
|                                               |                                 |                                 |                                 |                                 |                                 | 4                               | 30                              | 70                              | 131                             | 98                       | 31          |
|                                               |                                 |                                 |                                 |                                 |                                 | 4                               | 30                              | 76                              | 171                             | 118                      | 32          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 26                              | 126                             | 140                             | 61                       | 33          |
|                                               |                                 |                                 |                                 |                                 | 2                               | 17                              | 40                              | 82                              | 74                              |                          | 34          |
|                                               |                                 |                                 |                                 |                                 | 12                              | 33                              | 33                              | 115                             | 46                              | 52                       | 35          |
|                                               |                                 |                                 |                                 |                                 | 4                               | 48                              | 39                              | 130                             | 130                             | 31                       | 36          |
|                                               |                                 |                                 |                                 |                                 |                                 | 4                               | 18                              | 39                              | 130                             | 31                       | 37          |
|                                               |                                 |                                 |                                 |                                 |                                 | 1                               | 11                              | 33                              | 114                             | 63                       | 38          |
|                                               |                                 |                                 |                                 |                                 |                                 | 3                               | 37                              | 88                              | 116                             | 92                       | 39          |
|                                               |                                 |                                 |                                 |                                 |                                 | 9                               | 33                              | 76                              | 134                             | 81                       | 40          |
|                                               |                                 |                                 |                                 |                                 |                                 | 9                               | 33                              | 82                              | 173                             | 102                      | 41          |
|                                               |                                 |                                 |                                 |                                 |                                 | 2                               | 40                              | 152                             | 112                             | 44                       | 42          |
|                                               |                                 |                                 |                                 |                                 | 4                               | 18                              | 79                              | 109                             |                                 |                          | 43          |
|                                               |                                 |                                 |                                 |                                 | 5                               | 10                              | 109                             | 85                              | 46                              |                          | 44          |
|                                               |                                 |                                 |                                 |                                 | 3                               | 4                               | 63                              | 151                             | 28                              |                          | 45          |
|                                               |                                 |                                 |                                 |                                 | 3                               | 4                               | 33                              | 151                             | 28                              |                          | 46          |
|                                               |                                 |                                 |                                 |                                 |                                 | 2                               | 32                              | 132                             | 51                              | 2                        | 47          |

TABLE Q.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1913 TO 1915—

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 |
| 1        | Matchers—Concluded.               | 1913  | 336                  | 42.8                              | \$0.448                         | \$19.16                            | 336                                            |                      |                 |    |                      |    |                      |
| 2        | 13 plants.....                    | 1914  | 333                  | 42.8                              | .480                            | 20.56                              | 333                                            |                      |                 |    |                      |    |                      |
| 3        | 15 plants.....                    | 1914  | 399                  | 42.8                              | .484                            | 20.70                              | 399                                            |                      |                 |    |                      |    |                      |
| 4        |                                   | 1915  | 354                  | 42.8                              | .475                            | 20.34                              | 354                                            |                      |                 |    |                      |    |                      |
| 5        | Doublers:                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 6        | 9 plants.....                     | 1910  | 210                  | 42.7                              | .372                            | 15.86                              | 210                                            |                      |                 |    |                      |    |                      |
| 7        |                                   | 1911  | 252                  | 42.7                              | .401                            | 17.10                              | 252                                            |                      |                 |    |                      |    |                      |
| 8        |                                   | 1912  | 246                  | 42.7                              | .412                            | 17.58                              | 246                                            |                      |                 |    |                      |    |                      |
| 9        | 8 plants.....                     | 1912  | 216                  | 42.7                              | .423                            | 18.06                              | 216                                            |                      |                 |    |                      |    |                      |
| 10       |                                   | 1913  | 222                  | 42.7                              | .450                            | 19.21                              | 222                                            |                      |                 |    |                      |    |                      |
| 11       | 13 plants.....                    | 1913  | 336                  | 42.8                              | .429                            | 18.34                              | 336                                            |                      |                 |    |                      |    |                      |
| 12       |                                   | 1914  | 333                  | 42.8                              | .459                            | 19.66                              | 333                                            |                      |                 |    |                      |    |                      |
| 13       | 15 plants.....                    | 1914  | 399                  | 42.8                              | .462                            | 19.75                              | 399                                            |                      |                 |    |                      |    |                      |
| 14       | Sheet heaters:                    | 1915  | 354                  | 42.8                              | .453                            | 19.42                              | 354                                            |                      |                 |    |                      |    |                      |
| 15       | 9 plants.....                     | 1910  | 215                  | 42.7                              | .883                            | 37.68                              | 215                                            |                      |                 |    |                      |    |                      |
| 16       |                                   | 1911  | 259                  | 42.7                              | .911                            | 38.88                              | 259                                            |                      |                 |    |                      |    |                      |
| 17       |                                   | 1912  | 253                  | 42.7                              | .949                            | 40.51                              | 253                                            |                      |                 |    |                      |    |                      |
| 18       | 8 plants.....                     | 1912  | 223                  | 42.7                              | .989                            | 42.21                              | 223                                            |                      |                 |    |                      |    |                      |
| 19       |                                   | 1913  | 223                  | 42.7                              | .998                            | 42.60                              | 223                                            |                      |                 |    |                      |    |                      |
| 20       | 12 plants.....                    | 1913  | 307                  | 42.8                              | .993                            | 42.50                              | 307                                            |                      |                 |    |                      |    |                      |
| 21       |                                   | 1914  | 301                  | 42.9                              | .963                            | 41.24                              | 301                                            |                      |                 |    |                      |    |                      |
| 22       | 14 plants.....                    | 1914  | 364                  | 42.8                              | .966                            | 41.34                              | 364                                            |                      |                 |    |                      |    |                      |
| 23       | Sheet heaters, level              | 1915  | 324                  | 42.9                              | .868                            | 37.19                              | 324                                            |                      |                 |    |                      |    |                      |
| 24       | handle:                           |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 25       | 2 plants.....                     | 1913  | 14                   | 42.7                              | .707                            | 30.17                              | 14                                             |                      |                 |    |                      |    |                      |
| 26       |                                   | 1914  | 10                   | 42.7                              | .673                            | 28.72                              | 10                                             |                      |                 |    |                      |    |                      |
| 27       | 2 plants.....                     | 1914  | 56                   | 42.7                              | .762                            | 32.65                              | 56                                             |                      |                 |    |                      |    |                      |
| 28       | Sheet heaters' helpers:           | 1915  | 34                   | 42.7                              | .686                            | 29.27                              | 34                                             |                      |                 |    |                      |    |                      |
| 29       | 8 plants.....                     | 1910  | 174                  | 42.7                              | .377                            | 16.07                              | 174                                            |                      |                 |    |                      |    |                      |
| 30       |                                   | 1911  | 215                  | 42.7                              | .439                            | 18.59                              | 215                                            |                      |                 |    |                      |    |                      |
| 31       |                                   | 1912  | 208                  | 42.7                              | .439                            | 18.71                              | 208                                            |                      |                 |    |                      |    |                      |
| 32       | 7 plants.....                     | 1912  | 178                  | 42.7                              | .439                            | 18.74                              | 178                                            |                      |                 |    |                      |    |                      |
| 33       |                                   | 1913  | 178                  | 42.7                              | .511                            | 21.81                              | 178                                            |                      |                 |    |                      |    |                      |
| 34       | 10 plants.....                    | 1913  | 230                  | 42.9                              | .483                            | 20.70                              | 230                                            |                      |                 |    |                      |    |                      |
| 35       |                                   | 1914  | 230                  | 42.9                              | .494                            | 21.16                              | 230                                            |                      |                 |    |                      |    |                      |
| 36       | 13 plants.....                    | 1914  | 309                  | 42.8                              | .485                            | 29.73                              | 309                                            |                      |                 |    |                      |    |                      |
| 37       | Shearmen:                         | 1915  | 275                  | 42.9                              | .458                            | 19.60                              | 275                                            |                      |                 |    |                      |    |                      |
| 38       | 7 plants.....                     | 1910  | 85                   | 46.0                              | .689                            | 30.79                              | 73                                             |                      |                 |    | 12                   |    |                      |
| 39       |                                   | 1911  | 104                  | 44.9                              | .722                            | 32.86                              | 94                                             |                      |                 |    | 17                   |    |                      |
| 40       |                                   | 1912  | 105                  | 44.9                              | .768                            | 34.67                              | 95                                             |                      |                 |    | 10                   |    |                      |
| 41       | 6 plants.....                     | 1912  | 95                   | 45.1                              | .757                            | 34.42                              | 85                                             |                      |                 |    | 10                   |    |                      |
| 42       |                                   | 1913  | 93                   | 45.2                              | .801                            | 36.34                              | 83                                             |                      |                 |    | 10                   |    |                      |
| 43       | 8 plants.....                     | 1913  | 114                  | 42.9                              | .814                            | 34.90                              | 114                                            |                      |                 |    |                      |    |                      |
| 44       |                                   | 1914  | 114                  | 42.9                              | .836                            | 35.84                              | 114                                            |                      |                 |    |                      |    |                      |
| 45       | 10 plants.....                    | 1914  | 136                  | 42.9                              | .869                            | 36.84                              | 136                                            |                      |                 |    |                      |    |                      |
| 46       | Shearmen's helpers:               | 1915  | 110                  | 43.0                              | .82                             | 35.48                              | 115                                            |                      |                 |    |                      |    |                      |
| 47       | 6 plants.....                     | 1910  | 62                   | 46.4                              | .261                            | 11.99                              | 52                                             |                      |                 |    | 10                   |    |                      |
| 48       |                                   | 1911  | 83                   | 44.9                              | .308                            | 13.59                              | 75                                             |                      |                 |    | 8                    |    |                      |
| 49       |                                   | 1912  | 77                   | 45.1                              | .290                            | 12.88                              | 69                                             |                      |                 |    | 8                    |    |                      |
| 50       | 5 plants.....                     | 1912  | 67                   | 45.5                              | .267                            | 11.97                              | 59                                             |                      |                 |    | 8                    |    |                      |
| 51       |                                   | 1913  | 70                   | 45.3                              | .267                            | 11.93                              | 62                                             |                      |                 |    | 8                    |    |                      |

AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
SHEET MILLS—Continued.

| Employees whose rates of wages per hour were— |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | Line<br>No. |
|-----------------------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------|-------------|
| 12 and<br>under<br>14<br>cents.               | 14 and<br>under<br>16<br>cents. | 16 and<br>under<br>18<br>cents. | 18 and<br>under<br>20<br>cents. | 20 and<br>under<br>25<br>cents. | 25 and<br>under<br>30<br>cents. | 30 and<br>under<br>40<br>cents. | 40 and<br>under<br>50<br>cents. | 50 and<br>under<br>60<br>cents. | 60 and<br>under<br>70<br>cents. | 70 cents<br>and<br>over. |             |
|                                               |                                 |                                 |                                 | 1                               | 5                               | 91                              | 152                             | 85                              | 2                               |                          | 1           |
|                                               |                                 |                                 |                                 | 2                               | 10                              | 52                              | 118                             | 130                             | 21                              |                          | 2           |
|                                               |                                 |                                 |                                 | 2                               | 10                              | 52                              | 154                             | 154                             | 27                              |                          | 3           |
|                                               |                                 |                                 |                                 |                                 | 3                               | 61                              | 148                             | 121                             | 19                              | 2                        | 4           |
|                                               |                                 |                                 |                                 | 6                               | 16                              | 105                             | 83                              |                                 |                                 |                          | 5           |
|                                               |                                 |                                 |                                 |                                 | 10                              | 120                             | 101                             | 21                              |                                 |                          | 6           |
|                                               |                                 |                                 |                                 | 1                               | 3                               | 75                              | 153                             | 14                              |                                 |                          | 7           |
|                                               |                                 |                                 |                                 | 1                               | 3                               | 45                              | 153                             | 14                              |                                 |                          | 8           |
|                                               |                                 |                                 |                                 |                                 | 1                               | 39                              | 143                             | 36                              |                                 | 3                        | 9           |
|                                               |                                 |                                 |                                 | 1                               | 7                               | 109                             | 166                             | 53                              |                                 |                          | 10          |
|                                               |                                 |                                 |                                 | 1                               | 12                              | 63                              | 144                             | 104                             | 9                               |                          | 11          |
|                                               |                                 |                                 |                                 | 1                               | 12                              | 61                              | 192                             | 120                             | 10                              |                          | 12          |
|                                               |                                 |                                 |                                 |                                 | 2                               | 66                              | 202                             | 73                              | 9                               | 2                        | 13          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 9                               | 24                              | 182                      | 14          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 38                              | 221                      | 15          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 1                               | 36                              | 216                      | 16          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 1                               | 6                               | 216                      | 17          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 10                              | 213                      | 18          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 1                               | 14                              | 292                      | 19          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 2                               | 10                              | 289                      | 20          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 3                               | 11                              | 350                      | 21          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 3                               | 35                              | 286                      | 22          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 6                               | 8                        | 23          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 6                               | 4                        | 24          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 8                               | 48                       | 25          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 6                               | 12                              | 16                       | 26          |
|                                               |                                 |                                 |                                 |                                 | 9                               | 98                              | 63                              | 4                               |                                 |                          | 27          |
|                                               |                                 |                                 |                                 |                                 |                                 | 72                              | 90                              | 51                              | 1                               | 1                        | 28          |
|                                               |                                 |                                 |                                 |                                 |                                 | 68                              | 98                              | 40                              | 2                               |                          | 29          |
|                                               |                                 |                                 |                                 |                                 |                                 | 68                              | 68                              | 40                              | 2                               |                          | 30          |
|                                               |                                 |                                 |                                 |                                 |                                 | 27                              | 60                              | 62                              | 20                              | 9                        | 31          |
|                                               |                                 |                                 |                                 |                                 |                                 | 50                              | 78                              | 75                              | 18                              | 9                        | 32          |
|                                               |                                 |                                 |                                 |                                 |                                 | 47                              | 71                              | 77                              | 25                              | 10                       | 33          |
|                                               |                                 |                                 |                                 |                                 | 2                               | 59                              | 121                             | 91                              | 25                              | 11                       | 34          |
|                                               |                                 |                                 |                                 |                                 |                                 | 56                              | 167                             | 33                              | 7                               | 12                       | 35          |
|                                               |                                 |                                 |                                 |                                 |                                 | 11                              | 6                               | 13                              | 9                               | 46                       | 36          |
|                                               |                                 |                                 |                                 |                                 | 3                               | 5                               | 6                               | 30                              | 9                               | 51                       | 37          |
|                                               |                                 |                                 |                                 | 1                               | 1                               | 1                               | 6                               | 6                               | 9                               | 81                       | 38          |
|                                               |                                 |                                 |                                 | 1                               | 1                               | 1                               | 6                               | 6                               | 9                               | 71                       | 39          |
|                                               |                                 |                                 |                                 | 1                               | 1                               | 1                               | 1                               | 6                               | 22                              | 61                       | 40          |
|                                               |                                 |                                 |                                 |                                 |                                 | 1                               | 2                               | 11                              | 21                              | 79                       | 41          |
|                                               |                                 |                                 |                                 |                                 |                                 | 3                               | 1                               | 13                              | 10                              | 87                       | 42          |
|                                               |                                 |                                 |                                 |                                 |                                 | 3                               | 1                               | 10                              | 13                              | 109                      | 43          |
|                                               |                                 |                                 |                                 |                                 |                                 | 4                               | 2                               | 26                              | 83                              | 44                       | 44          |
|                                               |                                 |                                 |                                 | 26                              | 33                              | 1                               | 2                               |                                 |                                 |                          | 45          |
|                                               |                                 |                                 |                                 | 26                              | 28                              | 18                              | 1                               | 10                              |                                 |                          | 46          |
|                                               |                                 |                                 | 12                              | 8                               | 32                              | 15                              | 10                              |                                 |                                 |                          | 47          |
|                                               |                                 |                                 | 12                              | 8                               | 32                              | 15                              |                                 |                                 |                                 |                          | 48          |
|                                               |                                 |                                 | 12                              | 26                              | 11                              | 20                              | 1                               |                                 |                                 |                          | 49          |

TABLE Q.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1910 TO 1915—

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |     |                      |     |                      |    |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-----|----------------------|-----|----------------------|----|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60  | Over 60 and under 72 | 72  | Over 72 and under 84 | 84 |
| 1        | Shearmens' helpers—               |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |    |
| 2        | Concluded.                        |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |    |
| 3        | 7 plants .....                    | 1913  | 111                  | 42.9                              | \$0.251                         | \$10.77                            | 111                                            |                      |                 |     |                      |     |                      |    |
| 4        |                                   | 1914  | 91                   | 43.0                              | .290                            | 12.45                              | 91                                             |                      |                 |     |                      |     |                      |    |
| 5        | 9 plants .....                    | 1914  | 128                  | 42.9                              | .282                            | 12.09                              | 128                                            |                      |                 |     |                      |     |                      |    |
| 6        |                                   | 1915  | 146                  | 43.8                              | .242                            | 10.59                              | 139                                            | 3                    |                 |     | 4                    |     |                      |    |
| 7        | Openers:                          |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |    |
| 8        | 7 plants .....                    | 1910  | 138                  | 46.0                              | .274                            | 12.57                              | 118                                            |                      |                 |     | 20                   |     |                      |    |
| 9        |                                   | 1911  | 167                  | 45.2                              | .275                            | 12.35                              | 149                                            |                      |                 |     | 18                   |     |                      |    |
| 10       |                                   | 1912  | 180                  | 45.8                              | .289                            | 13.04                              | 156                                            |                      |                 |     | 24                   |     |                      |    |
| 11       | 6 plants .....                    | 1912  | 170                  | 46.0                              | .274                            | 12.43                              | 146                                            |                      |                 |     | 24                   |     |                      |    |
| 12       |                                   | 1913  | 168                  | 45.4                              | .279                            | 12.56                              | 148                                            |                      |                 |     | 20                   |     |                      |    |
| 13       | 7 plants .....                    | 1913  | 161                  | 42.8                              | .291                            | 12.45                              | 161                                            |                      |                 |     |                      |     |                      |    |
| 14       |                                   | 1914  | 159                  | 42.8                              | .282                            | 12.09                              | 159                                            |                      |                 |     |                      |     |                      |    |
| 15       | 9 plants .....                    | 1914  | 200                  | 42.8                              | .282                            | 12.06                              | 200                                            |                      |                 |     |                      |     |                      |    |
| 16       |                                   | 1915  | 180                  | 43.6                              | .273                            | 11.93                              | 173                                            | 3                    |                 |     | 4                    |     |                      |    |
| 17       | Picklers:                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |    |
| 18       | 4 plants .....                    | 1910  | 50                   | 70.8                              | .181                            | 12.75                              |                                                |                      |                 | 5   |                      | 45  |                      |    |
| 19       |                                   | 1911  | 49                   | 71.8                              | .172                            | 12.35                              |                                                |                      |                 | 5   |                      | 40  |                      | 4  |
| 20       | 5 plants .....                    | 1911  | 58                   | 71.2                              | .177                            | 12.54                              |                                                |                      |                 | 5   | 9                    | 40  |                      | 4  |
| 21       |                                   | 1912  | 39                   | 71.7                              | .186                            | 13.23                              |                                                |                      |                 | 5   | 6                    | 22  |                      | 6  |
| 22       | 4 plants .....                    | 1912  | 33                   | 72.4                              | .183                            | 13.17                              |                                                |                      |                 | 5   |                      | 22  |                      | 6  |
| 23       |                                   | 1913  | 30                   | 70.0                              | .202                            | 14.06                              |                                                |                      |                 | 5   |                      | 25  |                      |    |
| 24       | 8 plants .....                    | 1913  | 71                   | 68.1                              | .216                            | 14.49                              | 8                                              |                      |                 | 5   | 6                    | 52  |                      |    |
| 25       |                                   | 1914  | 71                   | 68.2                              | .215                            | 14.40                              | 8                                              |                      |                 | 5   | 4                    | 54  |                      |    |
| 26       | 9 plants .....                    | 1914  | 121                  | 69.6                              | .211                            | 14.55                              | 8                                              |                      |                 | 5   | 10                   | 98  |                      |    |
| 27       |                                   | 1915  | 126                  | 69.8                              | .209                            | 14.44                              | 8                                              |                      |                 | 4   | 8                    | 106 |                      |    |
| 28       | Laborers:                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |    |
| 29       | 9 plants .....                    | 1910  | 347                  | 63.1                              | .164                            | 10.35                              |                                                | 2                    | 12              | 223 | 44                   | 55  | 2                    | 9  |
| 30       |                                   | 1911  | 361                  | 63.6                              | .166                            | 10.54                              |                                                | 4                    | 13              | 191 | 90                   | 56  |                      | 7  |
| 31       |                                   | 1912  | 354                  | 63.5                              | .169                            | 10.72                              |                                                | 2                    | 11              | 192 | 91                   | 54  | 4                    |    |
| 32       | 8 plants .....                    | 1912  | 238                  | 63.8                              | .168                            | 10.76                              |                                                | 2                    | 11              | 131 | 36                   | 54  | 4                    |    |
| 33       |                                   | 1913  | 260                  | 65.0                              | .191                            | 12.39                              |                                                |                      | 20              | 108 | 48                   | 84  |                      |    |
| 34       | 13 plants .....                   | 1913  | 351                  | 64.9                              | .190                            | 12.28                              |                                                |                      | 58              | 131 | 47                   | 98  | 14                   | 3  |
| 35       |                                   | 1914  | 286                  | 65.9                              | .190                            | 12.46                              |                                                | 1                    | 38              | 60  | 103                  | 66  | 11                   | 7  |
| 36       | 15 plants .....                   | 1914  | 378                  | 65.9                              | .188                            | 12.37                              |                                                | 1                    | 38              | 100 | 121                  | 100 | 11                   | 7  |
| 37       |                                   | 1915  | 394                  | 65.0                              | .188                            | 12.21                              |                                                | 1                    | 40              | 127 | 120                  | 69  | 32                   | 5  |
| 38       | Unclassified—productive:          |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |    |
| 39       | 13 plants .....                   | 1914  | 1,445                | 66.5                              | .212                            | 14.05                              | 83                                             | 7                    | 98              | 301 | 350                  | 498 | 58                   | 50 |
| 40       |                                   | 1915  | 1,207                | 66.0                              | .211                            | 13.88                              | 67                                             | 4                    | 46              | 324 | 326                  | 335 | 53                   | 52 |
| 41       | Unclassified—nonproductive:       |       |                      |                                   |                                 |                                    |                                                |                      |                 |     |                      |     |                      |    |
| 42       | 13 plants .....                   | 1914  | 514                  | 69.2                              | .208                            | 14.41                              |                                                |                      | 10              | 85  | 170                  | 146 | 41                   | 62 |
| 43       |                                   | 1915  | 589                  | 68.6                              | .207                            | 14.25                              |                                                |                      | 2               | 100 | 250                  | 141 | 37                   | 59 |

AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
SHEET MILLS—Concluded.

| Employees whose rates of wages per hour were— |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | Line<br>No. |
|-----------------------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------|-------------|
| 12 and<br>under<br>14<br>cents.               | 14 and<br>under<br>16<br>cents. | 16 and<br>under<br>18<br>cents. | 18 and<br>under<br>20<br>cents. | 20 and<br>under<br>25<br>cents. | 25 and<br>under<br>30<br>cents. | 30 and<br>under<br>40<br>cents. | 40 and<br>under<br>50<br>cents. | 50 and<br>under<br>60<br>cents. | 60 and<br>under<br>70<br>cents. | 70 cents<br>and<br>over. |             |
|                                               |                                 | 5                               | 12                              | 34                              | 41                              | 19                              |                                 |                                 |                                 |                          | 1           |
|                                               |                                 |                                 | 2                               | 20                              | 31                              | 33                              | 5                               |                                 |                                 |                          | 2           |
|                                               |                                 |                                 | 10                              | 31                              | 36                              | 46                              | 5                               |                                 |                                 |                          | 3           |
|                                               | 3                               | 6                               | 22                              | 51                              | 38                              | 26                              |                                 |                                 |                                 |                          | 4           |
| 2                                             |                                 |                                 |                                 |                                 | 121                             | 5                               | 10                              |                                 |                                 |                          | 5           |
|                                               |                                 | 2                               |                                 |                                 | 143                             | 3                               | 1                               | 17                              | 1                               |                          | 6           |
|                                               |                                 | 8                               |                                 | 58                              | 70                              | 22                              | 8                               | 14                              |                                 |                          | 7           |
|                                               |                                 | 8                               |                                 | 58                              | 70                              | 22                              | 8                               | 4                               |                                 |                          | 8           |
|                                               |                                 | 3                               |                                 | 7                               | 138                             | 20                              |                                 |                                 |                                 |                          | 9           |
|                                               |                                 |                                 |                                 | 17                              | 92                              | 50                              | 2                               |                                 |                                 |                          | 10          |
|                                               |                                 |                                 |                                 | 25                              | 99                              | 35                              |                                 |                                 |                                 |                          | 11          |
|                                               |                                 |                                 | 1                               | 33                              | 111                             | 55                              |                                 |                                 |                                 |                          | 12          |
| 7                                             | 2                               | 1                               |                                 | 30                              | 81                              | 58                              | 1                               |                                 |                                 |                          | 13          |
|                                               |                                 | 28                              | 14                              | 8                               |                                 |                                 |                                 |                                 |                                 |                          | 14          |
|                                               |                                 | 38                              | 4                               | 7                               |                                 |                                 |                                 |                                 |                                 |                          | 15          |
|                                               |                                 | 38                              | 4                               | 16                              |                                 |                                 |                                 |                                 |                                 |                          | 16          |
|                                               |                                 | 20                              | 6                               | 13                              |                                 |                                 |                                 |                                 |                                 |                          | 17          |
|                                               |                                 | 20                              | 6                               | 7                               |                                 |                                 |                                 |                                 |                                 |                          | 18          |
|                                               |                                 | 17                              |                                 | 6                               | 7                               |                                 |                                 |                                 |                                 |                          | 19          |
|                                               |                                 | 19                              | 1                               | 36                              | 7                               | 8                               |                                 |                                 |                                 |                          | 20          |
|                                               |                                 | 22                              |                                 | 34                              | 7                               | 8                               |                                 |                                 |                                 |                          | 21          |
|                                               |                                 | 22                              |                                 | 84                              | 7                               | 8                               |                                 |                                 |                                 |                          | 22          |
|                                               |                                 | 30                              |                                 | 78                              | 10                              | 8                               |                                 |                                 |                                 |                          | 23          |
|                                               | 74                              | 273                             |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | 24          |
| 66                                            |                                 | 295                             |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | 25          |
| 2                                             |                                 | 352                             |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | 26          |
|                                               | 2                               | 236                             |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | 27          |
|                                               |                                 | 34                              | 216                             | 10                              |                                 |                                 |                                 |                                 |                                 |                          | 28          |
|                                               |                                 | 75                              | 266                             | 10                              |                                 |                                 |                                 |                                 |                                 |                          | 29          |
|                                               |                                 | 60                              | 223                             | 3                               |                                 |                                 |                                 |                                 |                                 |                          | 30          |
|                                               |                                 | 94                              | 263                             | 21                              |                                 |                                 |                                 |                                 |                                 |                          | 31          |
|                                               |                                 | 96                              | 287                             | 11                              |                                 |                                 |                                 |                                 |                                 |                          | 32          |
|                                               | 2                               | 176                             | 499                             | 544                             | 181                             | 37                              | 1                               | 1                               | 4                               |                          | 33          |
|                                               | 2                               | 209                             | 351                             | 445                             | 160                             | 35                              | 2                               | 3                               |                                 |                          | 34          |
|                                               | 1                               | 46                              | 284                             | 130                             | 27                              | 26                              |                                 |                                 |                                 |                          | 35          |
|                                               | 3                               | 77                              | 324                             | 120                             | 37                              | 25                              | 2                               | 1                               |                                 |                          | 36          |

TABLE R.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, 1913 TO 1915—

[The abbreviation "G. L. and M. W.," stands for "Great Lakes and

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Pair heaters:                               |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 2        | Pittsburgh—                                 | 1913  | 231                  | 42.7                              | \$0.555                         | \$23.67                            | 231                                            |                      |                 |    |                      |    |                      |    |
| 3        | 9 plants.....                               | 1914  | 234                  | 42.7                              | .553                            | 23.86                              | 234                                            |                      |                 |    |                      |    |                      |    |
| 4        | 10 plants.....                              | 1914  | 261                  | 42.7                              | .561                            | 23.93                              | 261                                            |                      |                 |    |                      |    |                      |    |
| 5        | G. L. and M. W.—                            | 1915  | 231                  | 42.7                              | .534                            | 22.78                              | 231                                            |                      |                 |    |                      |    |                      |    |
| 6        | 4 plants.....                               | 1913  | 105                  | 43.2                              | .516                            | 22.25                              | 105                                            |                      |                 |    |                      |    |                      |    |
| 7        |                                             | 1914  | 99                   | 43.2                              | .485                            | 20.93                              | 99                                             |                      |                 |    |                      |    |                      |    |
| 8        | 5 plants.....                               | 1914  | 138                  | 43.1                              | .500                            | 21.53                              | 138                                            |                      |                 |    |                      |    |                      |    |
| 9        |                                             | 1915  | 123                  | 43.2                              | .488                            | 21.03                              | 123                                            |                      |                 |    |                      |    |                      |    |
| 10       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 11       | 13 plants.....                              | 1913  | 336                  | 42.8                              | .543                            | 23.23                              | 336                                            |                      |                 |    |                      |    |                      |    |
| 12       |                                             | 1914  | 333                  | 42.8                              | .537                            | 22.99                              | 333                                            |                      |                 |    |                      |    |                      |    |
| 13       | 15 plants.....                              | 1914  | 299                  | 42.8                              | .540                            | 23.17                              | 399                                            |                      |                 |    |                      |    |                      |    |
| 14       |                                             | 1915  | 354                  | 42.8                              | .518                            | 22.17                              | 354                                            |                      |                 |    |                      |    |                      |    |
| 15       | Rollers:                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 16       | Pittsburgh—                                 | 1913  | 230                  | 42.7                              | 1.484                           | 63.37                              | 230                                            |                      |                 |    |                      |    |                      |    |
| 17       | 9 plants.....                               | 1914  | 233                  | 42.7                              | 1.482                           | 63.23                              | 233                                            |                      |                 |    |                      |    |                      |    |
| 18       | 10 plants.....                              | 1914  | 258                  | 42.7                              | 1.491                           | 63.61                              | 258                                            |                      |                 |    |                      |    |                      |    |
| 19       | G. L. and M. W.—                            | 1915  | 225                  | 42.7                              | 1.279                           | 54.55                              | 225                                            |                      |                 |    |                      |    |                      |    |
| 20       | 4 plants.....                               | 1913  | 105                  | 43.2                              | 1.459                           | 63.01                              | 105                                            |                      |                 |    |                      |    |                      |    |
| 21       |                                             | 1914  | 99                   | 43.2                              | 1.337                           | 57.69                              | 99                                             |                      |                 |    |                      |    |                      |    |
| 22       | 5 plants.....                               | 1914  | 136                  | 43.1                              | 1.316                           | 56.62                              | 136                                            |                      |                 |    |                      |    |                      |    |
| 23       |                                             | 1915  | 123                  | 43.2                              | 1.281                           | 55.26                              | 123                                            |                      |                 |    |                      |    |                      |    |
| 24       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 25       | 13 plants.....                              | 1913  | 335                  | 42.8                              | 1.476                           | 63.21                              | 335                                            |                      |                 |    |                      |    |                      |    |
| 26       |                                             | 1914  | 332                  | 42.8                              | 1.439                           | 61.53                              | 332                                            |                      |                 |    |                      |    |                      |    |
| 27       | 15 plants.....                              | 1914  | 394                  | 42.8                              | 1.431                           | 61.27                              | 394                                            |                      |                 |    |                      |    |                      |    |
| 28       |                                             | 1915  | 348                  | 42.9                              | 1.280                           | 54.87                              | 348                                            |                      |                 |    |                      |    |                      |    |
| 29       | Rollers' helpers or                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 30       | finishers:                                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 31       | Pittsburgh—                                 | 1913  | 138                  | 42.7                              | .507                            | 21.61                              | 138                                            |                      |                 |    |                      |    |                      |    |
| 32       | 6 plants.....                               | 1914  | 149                  | 42.7                              | .608                            | 25.95                              | 149                                            |                      |                 |    |                      |    |                      |    |
| 33       | 7 plants.....                               | 1914  | 176                  | 42.7                              | .577                            | 24.62                              | 176                                            |                      |                 |    |                      |    |                      |    |
| 34       | G. L. and M. W.—                            | 1915  | 140                  | 42.7                              | .490                            | 20.92                              | 140                                            |                      |                 |    |                      |    |                      |    |
| 35       | 2 plants.....                               | 1913  | 33                   | 42.7                              | .490                            | 20.92                              | 33                                             |                      |                 |    |                      |    |                      |    |
| 36       |                                             | 1914  | 38                   | 42.7                              | .436                            | 18.62                              | 38                                             |                      |                 |    |                      |    |                      |    |
| 37       | 3 plants.....                               | 1914  | 88                   | 43.3                              | .511                            | 22.03                              | 88                                             |                      |                 |    |                      |    |                      |    |
| 38       |                                             | 1915  | 93                   | 43.4                              | .416                            | 18.03                              | 93                                             |                      |                 |    |                      |    |                      |    |
| 39       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 40       | 8 plants.....                               | 1913  | 171                  | 42.7                              | .503                            | 21.48                              | 171                                            |                      |                 |    |                      |    |                      |    |
| 41       |                                             | 1914  | 187                  | 42.7                              | .573                            | 24.46                              | 187                                            |                      |                 |    |                      |    |                      |    |
| 42       | 10 plants.....                              | 1914  | 264                  | 42.9                              | .555                            | 23.77                              | 264                                            |                      |                 |    |                      |    |                      |    |
| 43       |                                             | 1915  | 233                  | 42.9                              | .461                            | 19.77                              | 233                                            |                      |                 |    |                      |    |                      |    |
| 44       | Roughers:                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 45       | Pittsburgh—                                 | 1913  | 231                  | 42.7                              | .672                            | 28.67                              | 231                                            |                      |                 |    |                      |    |                      |    |
| 46       | 9 plants.....                               | 1914  | 234                  | 42.7                              | .676                            | 28.85                              | 234                                            |                      |                 |    |                      |    |                      |    |
| 47       | 10 plants.....                              | 1914  | 261                  | 42.7                              | .678                            | 28.94                              | 261                                            |                      |                 |    |                      |    |                      |    |
| 48       |                                             | 1915  | 230                  | 42.7                              | .641                            | 27.37                              | 230                                            |                      |                 |    |                      |    |                      |    |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS.  
SHEET MILLS.

Middle West." The figures for each group of years are for identical plants.)

| Employees whose rates of wages per hour were— |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | Line<br>No. |
|-----------------------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------|-------------|
| 12 and<br>under<br>14<br>cents.               | 14 and<br>under<br>16<br>cents. | 16 and<br>under<br>18<br>cents. | 18 and<br>under<br>20<br>cents. | 20 and<br>under<br>25<br>cents. | 25 and<br>under<br>30<br>cents. | 30 and<br>under<br>40<br>cents. | 40 and<br>under<br>50<br>cents. | 50 and<br>under<br>60<br>cents. | 60 and<br>under<br>70<br>cents. | 70 cents<br>and<br>over. |             |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 | 11                              | 37                              | 115                             | 64                              | 4                        | 1           |
|                                               |                                 |                                 |                                 |                                 | 2                               | 12                              | 28                              | 120                             | 67                              | 5                        | 2           |
|                                               |                                 |                                 |                                 |                                 | 2                               | 12                              | 31                              | 133                             | 78                              | 5                        | 3           |
|                                               |                                 |                                 |                                 |                                 |                                 | 4                               | 73                              | 124                             | 27                              | 3                        | 4           |
|                                               |                                 |                                 |                                 |                                 |                                 | 11                              | 31                              | 46                              | 17                              |                          | 5           |
|                                               |                                 |                                 |                                 |                                 | 2                               | 11                              | 42                              | 39                              | 5                               |                          | 6           |
|                                               |                                 |                                 |                                 |                                 | 2                               | 11                              | 46                              | 71                              | 8                               |                          | 7           |
|                                               |                                 |                                 |                                 |                                 |                                 | 7                               | 73                              | 38                              | 5                               |                          | 8           |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 | 4                               | 22                              | 68                              | 161                             | 81                              | 4                        | 9           |
|                                               |                                 |                                 |                                 |                                 |                                 | 23                              | 70                              | 159                             | 72                              | 5                        | 10          |
|                                               |                                 |                                 |                                 |                                 | 4                               | 23                              | 77                              | 204                             | 86                              | 5                        | 11          |
|                                               |                                 |                                 |                                 |                                 |                                 | 11                              | 146                             | 162                             | 32                              | 3                        | 12          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 230                      | 13          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 233                      | 14          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 258                      | 15          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 1                               | 224                      | 16          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 105                      | 17          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 99                       | 18          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 136                      | 19          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 123                      | 20          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 335                      | 21          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 332                      | 22          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 394                      | 23          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 1                               | 347                      | 24          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 | 52                              | 30                              | 16                              | 18                              | 22                       | 25          |
|                                               |                                 |                                 |                                 |                                 |                                 | 51                              | 41                              | 11                              | 17                              | 29                       | 26          |
|                                               |                                 |                                 |                                 |                                 |                                 | 65                              | 53                              | 12                              | 17                              | 29                       | 27          |
|                                               |                                 |                                 |                                 |                                 |                                 | 44                              | 57                              | 8                               | 10                              | 21                       | 28          |
|                                               |                                 |                                 |                                 |                                 |                                 | 2                               | 17                              | 13                              | 1                               |                          | 29          |
|                                               |                                 |                                 |                                 | 1                               |                                 | 7                               | 22                              | 8                               |                                 |                          | 30          |
|                                               |                                 |                                 |                                 |                                 |                                 | 23                              | 21                              | 17                              | 24                              | 3                        | 31          |
|                                               |                                 |                                 |                                 |                                 |                                 | 34                              | 58                              | 1                               |                                 |                          | 32          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 | 1                               |                                 | 54                              | 47                              | 29                              | 19                              | 22                       | 33          |
|                                               |                                 |                                 |                                 |                                 |                                 | 58                              | 63                              | 19                              | 17                              | 29                       | 34          |
|                                               |                                 |                                 |                                 |                                 |                                 | 88                              | 74                              | 29                              | 41                              | 32                       | 35          |
|                                               |                                 |                                 |                                 |                                 |                                 | 78                              | 115                             | 9                               | 10                              | 21                       | 36          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 5                               | 48                              | 84                              | 94                       | 37          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 8                               | 34                              | 102                             | 90                       | 28          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 8                               | 37                              | 112                             | 104                      | 39          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 12                              | 61                              | 101                             | 56                       | 40          |

TABLE R.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—SHEET

| Line No. | Occupation, district, and number of plants.           | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |                      |    |
|----------|-------------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----------------------|----|
|          |                                                       |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | Over 72 and under 84 | 84 |
| 1        | Roughers—Concld.<br>G. L. and M. W.—<br>4 plants..... | 1913  | 105                  | 43.2                              | \$0.577                         | \$24.89                            | 105                                            |                      |                 |    |                      |                      |    |
|          |                                                       | 1914  | 99                   | 43.2                              | .566                            | 24.45                              | 99                                             |                      |                 |    |                      |                      |    |
| 3        | 5 plants.....                                         | 1914  | 138                  | 43.1                              | .591                            | 25.43                              | 138                                            |                      |                 |    |                      |                      |    |
|          |                                                       | 1915  | 123                  | 43.2                              | .577                            | 24.91                              | 123                                            |                      |                 |    |                      |                      |    |
| 5        | Total—<br>13 plants.....                              | 1913  | 336                  | 42.8                              | .642                            | 27.49                              | 336                                            |                      |                 |    |                      |                      |    |
|          |                                                       | 1914  | 333                  | 42.8                              | .644                            | 27.54                              | 333                                            |                      |                 |    |                      |                      |    |
| 7        | 15 plants.....                                        | 1914  | 399                  | 42.8                              | .648                            | 27.73                              | 399                                            |                      |                 |    |                      |                      |    |
|          |                                                       | 1915  | 353                  | 42.8                              | .619                            | 26.51                              | 353                                            |                      |                 |    |                      |                      |    |
| 9        | Catchers:<br>Pittsburgh—<br>9 plants.....             | 1913  | 231                  | 42.7                              | .653                            | 27.84                              | 231                                            |                      |                 |    |                      |                      |    |
|          |                                                       | 1914  | 234                  | 42.7                              | .656                            | 27.98                              | 234                                            |                      |                 |    |                      |                      |    |
| 11       | 10 plants.....                                        | 1914  | 261                  | 42.7                              | .660                            | 28.17                              | 261                                            |                      |                 |    |                      |                      |    |
|          |                                                       | 1915  | 227                  | 42.7                              | .605                            | 25.81                              | 227                                            |                      |                 |    |                      |                      |    |
| 13       | G. L. and M. W.—<br>4 plants.....                     | 1913  | 105                  | 43.2                              | .577                            | 24.89                              | 105                                            |                      |                 |    |                      |                      |    |
|          |                                                       | 1914  | 99                   | 43.2                              | .566                            | 24.45                              | 99                                             |                      |                 |    |                      |                      |    |
| 15       | 5 plants.....                                         | 1914  | 138                  | 43.1                              | .591                            | 25.43                              | 138                                            |                      |                 |    |                      |                      |    |
|          |                                                       | 1915  | 123                  | 43.2                              | .577                            | 24.91                              | 123                                            |                      |                 |    |                      |                      |    |
| 17       | Total—<br>13 plants.....                              | 1913  | 336                  | 42.8                              | .629                            | 26.92                              | 336                                            |                      |                 |    |                      |                      |    |
|          |                                                       | 1914  | 333                  | 42.8                              | .629                            | 26.93                              | 333                                            |                      |                 |    |                      |                      |    |
| 19       | 15 plants.....                                        | 1914  | 399                  | 42.8                              | .636                            | 27.23                              | 399                                            |                      |                 |    |                      |                      |    |
|          |                                                       | 1915  | 350                  | 42.8                              | .595                            | 25.49                              | 350                                            |                      |                 |    |                      |                      |    |
| 21       | Matchers:<br>Pittsburgh—<br>9 plants.....             | 1913  | 231                  | 42.7                              | .465                            | 19.83                              | 231                                            |                      |                 |    |                      |                      |    |
|          |                                                       | 1914  | 234                  | 42.7                              | .502                            | 21.40                              | 234                                            |                      |                 |    |                      |                      |    |
| 23       | 10 plants.....                                        | 1914  | 261                  | 42.7                              | .507                            | 21.61                              | 261                                            |                      |                 |    |                      |                      |    |
|          |                                                       | 1915  | 231                  | 42.7                              | .488                            | 20.82                              | 231                                            |                      |                 |    |                      |                      |    |
| 25       | G. L. and M. W.—<br>4 plants.....                     | 1913  | 105                  | 43.2                              | .410                            | 17.68                              | 105                                            |                      |                 |    |                      |                      |    |
|          |                                                       | 1914  | 99                   | 43.2                              | .430                            | 18.56                              | 99                                             |                      |                 |    |                      |                      |    |
| 27       | 5 plants.....                                         | 1914  | 138                  | 43.1                              | .441                            | 18.98                              | 138                                            |                      |                 |    |                      |                      |    |
|          |                                                       | 1915  | 123                  | 43.2                              | .451                            | 19.45                              | 123                                            |                      |                 |    |                      |                      |    |
| 29       | Total—<br>13 plants.....                              | 1913  | 336                  | 42.8                              | .448                            | 19.16                              | 336                                            |                      |                 |    |                      |                      |    |
|          |                                                       | 1914  | 333                  | 42.8                              | .480                            | 20.56                              | 333                                            |                      |                 |    |                      |                      |    |
| 31       | 15 plants.....                                        | 1914  | 399                  | 42.8                              | .484                            | 20.70                              | 399                                            |                      |                 |    |                      |                      |    |
|          |                                                       | 1915  | 354                  | 42.8                              | .475                            | 20.34                              | 354                                            |                      |                 |    |                      |                      |    |
| 33       | Doublers:<br>Pittsburgh—<br>9 plants.....             | 1913  | 231                  | 42.7                              | .445                            | 19.00                              | 231                                            |                      |                 |    |                      |                      |    |
|          |                                                       | 1914  | 234                  | 42.7                              | .479                            | 20.45                              | 234                                            |                      |                 |    |                      |                      |    |
| 35       | 10 plants.....                                        | 1914  | 261                  | 42.7                              | .483                            | 20.62                              | 261                                            |                      |                 |    |                      |                      |    |
|          |                                                       | 1915  | 231                  | 42.7                              | .467                            | 19.92                              | 231                                            |                      |                 |    |                      |                      |    |
| 37       | G. L. and M. W.—<br>4 plants.....                     | 1913  | 105                  | 43.2                              | .392                            | 16.90                              | 105                                            |                      |                 |    |                      |                      |    |
|          |                                                       | 1914  | 99                   | 43.2                              | .412                            | 17.79                              | 99                                             |                      |                 |    |                      |                      |    |
| 39       | 5 plants.....                                         | 1914  | 138                  | 43.1                              | .421                            | 18.11                              | 138                                            |                      |                 |    |                      |                      |    |
|          |                                                       | 1915  | 123                  | 43.2                              | .428                            | 18.47                              | 123                                            |                      |                 |    |                      |                      |    |



AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
MILLS—Continued.

| Employees whose rates of wages per hour were— |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | Line<br>No. |
|-----------------------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------|-------------|
| 12 and<br>under<br>14<br>cents.               | 14 and<br>under<br>16<br>cents. | 16 and<br>under<br>18<br>cents. | 18 and<br>under<br>20<br>cents. | 20 and<br>under<br>25<br>cents. | 25 and<br>under<br>30<br>cents. | 30 and<br>under<br>40<br>cents. | 40 and<br>under<br>50<br>cents. | 50 and<br>under<br>60<br>cents. | 60 and<br>under<br>70<br>cents. | 70 cents<br>and<br>over. |             |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 | 2                               | 24                              | 41                              | 21                              | 17                       | 1           |
|                                               |                                 |                                 |                                 |                                 |                                 | 4                               | 22                              | 36                              | 29                              | 8                        | 2           |
|                                               |                                 |                                 |                                 |                                 |                                 | 4                               | 22                              | 39                              | 59                              | 14                       | 3           |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 14                              | 65                              | 39                              | 5                        | 4           |
|                                               |                                 |                                 |                                 |                                 |                                 | 2                               | 29                              | 89                              | 105                             | 111                      | 5           |
|                                               |                                 |                                 |                                 |                                 |                                 | 4                               | 30                              | 70                              | 131                             | 98                       | 6           |
|                                               |                                 |                                 |                                 |                                 |                                 | 4                               | 30                              | 76                              | 171                             | 118                      | 7           |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 26                              | 128                             | 140                             | 61                       | 8           |
|                                               |                                 |                                 |                                 |                                 |                                 | 1                               | 13                              | 47                              | 95                              | 75                       | 9           |
|                                               |                                 |                                 |                                 |                                 |                                 | 5                               | 11                              | 40                              | 105                             | 73                       | 10          |
|                                               |                                 |                                 |                                 |                                 |                                 | 5                               | 11                              | 43                              | 114                             | 88                       | 11          |
|                                               |                                 |                                 |                                 |                                 |                                 | 2                               | 26                              | 87                              | 73                              | 39                       | 12          |
|                                               |                                 |                                 |                                 |                                 |                                 | 2                               | 24                              | 41                              | 21                              | 17                       | 13          |
|                                               |                                 |                                 |                                 |                                 |                                 | 4                               | 22                              | 36                              | 29                              | 8                        | 14          |
|                                               |                                 |                                 |                                 |                                 |                                 | 4                               | 22                              | 39                              | 59                              | 14                       | 15          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 14                              | 65                              | 39                              | 5                        | 16          |
|                                               |                                 |                                 |                                 |                                 |                                 | 3                               | 37                              | 88                              | 116                             | 92                       | 17          |
|                                               |                                 |                                 |                                 |                                 |                                 | 9                               | 33                              | 76                              | 134                             | 81                       | 18          |
|                                               |                                 |                                 |                                 |                                 |                                 | 9                               | 33                              | 82                              | 173                             | 102                      | 19          |
|                                               |                                 |                                 |                                 |                                 |                                 | 2                               | 40                              | 152                             | 112                             | 44                       | 20          |
|                                               |                                 |                                 |                                 |                                 | 2                               | 41                              | 116                             | 70                              | 2                               |                          | 21          |
|                                               |                                 |                                 |                                 |                                 | 6                               | 19                              | 77                              | 112                             | 19                              |                          | 22          |
|                                               |                                 |                                 |                                 | 1                               | 6                               | 19                              | 81                              | 129                             | 25                              |                          | 23          |
|                                               |                                 |                                 |                                 | 3                               | 43                              | 66                              | 99                              | 99                              | 18                              | 2                        | 24          |
|                                               |                                 |                                 |                                 | 1                               | 3                               | 50                              | 36                              | 15                              |                                 |                          | 25          |
|                                               |                                 |                                 |                                 | 1                               | 4                               | 33                              | 41                              | 18                              | 2                               |                          | 26          |
|                                               |                                 |                                 |                                 | 1                               | 4                               | 33                              | 73                              | 25                              | 2                               |                          | 27          |
|                                               |                                 |                                 |                                 |                                 |                                 | 18                              | 82                              | 22                              | 1                               |                          | 28          |
|                                               |                                 |                                 |                                 | 1                               | 5                               | 91                              | 152                             | 85                              | 2                               |                          | 29          |
|                                               |                                 |                                 |                                 | 2                               | 10                              | 52                              | 118                             | 130                             | 21                              |                          | 30          |
|                                               |                                 |                                 |                                 | 2                               | 10                              | 52                              | 154                             | 154                             | 27                              |                          | 31          |
|                                               |                                 |                                 |                                 |                                 | 3                               | 61                              | 148                             | 121                             | 19                              | 2                        | 32          |
|                                               |                                 |                                 |                                 |                                 | 1                               | 54                              | 130                             | 46                              |                                 |                          | 33          |
|                                               |                                 |                                 |                                 |                                 | 6                               | 27                              | 102                             | 90                              | 9                               |                          | 34          |
|                                               |                                 |                                 |                                 |                                 | 6                               | 27                              | 114                             | 104                             | 10                              |                          | 35          |
|                                               |                                 |                                 |                                 |                                 | 1                               | 40                              | 114                             | 65                              | 9                               | 2                        | 36          |
|                                               |                                 |                                 |                                 | 1                               | 6                               | 55                              | 36                              | 7                               |                                 |                          | 37          |
|                                               |                                 |                                 |                                 | 1                               | 6                               | 36                              | 42                              | 14                              |                                 |                          | 38          |
|                                               |                                 |                                 |                                 | 1                               | 6                               | 37                              | 78                              | 16                              |                                 |                          | 39          |
|                                               |                                 |                                 |                                 |                                 | 1                               | 26                              | 88                              | 8                               |                                 |                          | 40          |

TABLE R.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, 1913 TO 1915—SHEET

| Line No. | Occupation, and number of plants.               | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |
|----------|-------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|
|          |                                                 |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 |
|          | <b>Doublers—Concld. Total—</b>                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 1        | 13 plants.....                                  | 1913  | 336                  | 42.8                              | \$0.47                          | \$18.34                            | 336                                            |                      |                 |    |                      |    |                      |
| 2        |                                                 | 1914  | 333                  | 42.8                              | .459                            | 19.66                              | 333                                            |                      |                 |    |                      |    |                      |
| 3        | 15 plants.....                                  | 1914  | 399                  | 42.8                              | .467                            | 19.75                              | 399                                            |                      |                 |    |                      |    |                      |
| 4        |                                                 | 1915  | 354                  | 42.8                              | .453                            | 19.42                              | 354                                            |                      |                 |    |                      |    |                      |
|          | <b>Sheet heaters: Pittsburgh—</b>               |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 5        | 8 plants.....                                   | 1913  | 209                  | 42.7                              | 1.018                           | 43.45                              | 209                                            |                      |                 |    |                      |    |                      |
| 6        |                                                 | 1914  | 207                  | 42.7                              | 1.006                           | 42.91                              | 207                                            |                      |                 |    |                      |    |                      |
| 7        | 9 plants.....                                   | 1914  | 234                  | 42.7                              | 1.007                           | 42.90                              | 234                                            |                      |                 |    |                      |    |                      |
| 8        |                                                 | 1915  | 207                  | 42.7                              | .871                            | 37.17                              | 207                                            |                      |                 |    |                      |    |                      |
|          | <b>G. L. and M. W.—</b>                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 9        | 4 plants.....                                   | 1913  | 98                   | 43.2                              | .938                            | 40.47                              | 98                                             |                      |                 |    |                      |    |                      |
| 10       |                                                 | 1914  | 94                   | 43.3                              | .869                            | 37.56                              | 94                                             |                      |                 |    |                      |    |                      |
| 11       | 5 plants.....                                   | 1914  | 130                  | 43.1                              | .895                            | 38.55                              | 130                                            |                      |                 |    |                      |    |                      |
| 12       |                                                 | 1915  | 117                  | 43.2                              | .867                            | 37.23                              | 117                                            |                      |                 |    |                      |    |                      |
|          | <b>Total—</b>                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 13       | 12 plants.....                                  | 1913  | 307                  | 42.8                              | .993                            | 42.50                              | 307                                            |                      |                 |    |                      |    |                      |
| 14       |                                                 | 1914  | 301                  | 42.9                              | .963                            | 41.24                              | 301                                            |                      |                 |    |                      |    |                      |
| 15       | 14 plants.....                                  | 1914  | 364                  | 42.8                              | .966                            | 41.34                              | 364                                            |                      |                 |    |                      |    |                      |
| 16       |                                                 | 1915  | 344                  | 42.9                              | .868                            | 37.19                              | 344                                            |                      |                 |    |                      |    |                      |
|          | <b>Sheet heaters, level-handed: Pittsburgh—</b> |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 17       | 1 plant.....                                    | 1913  | 2                    | 42.7                              | .629                            | 23.84                              | 2                                              |                      |                 |    |                      |    |                      |
| 18       |                                                 | 1914  | 2                    | 42.7                              | .701                            | 29.99                              | 2                                              |                      |                 |    |                      |    |                      |
| 19       | 1 plant.....                                    | 1914  | 48                   | 42.7                              | .773                            | 32.21                              | 48                                             |                      |                 |    |                      |    |                      |
| 20       |                                                 | 1915  | 24                   | 42.7                              | .681                            | 29.19                              | 24                                             |                      |                 |    |                      |    |                      |
|          | <b>G. L. and M. W.—</b>                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 21       | 1 plant.....                                    | 1913  | 12                   | 42.7                              | .720                            | 30.72                              | 12                                             |                      |                 |    |                      |    |                      |
| 22       |                                                 | 1914  | 8                    | 42.7                              | .666                            | 28.41                              | 8                                              |                      |                 |    |                      |    |                      |
| 23       |                                                 | 1915  | 10                   | 42.7                              | .690                            | 29.44                              | 10                                             |                      |                 |    |                      |    |                      |
|          | <b>Total—</b>                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 24       | 2 plants.....                                   | 1913  | 14                   | 42.7                              | .707                            | 30.17                              | 14                                             |                      |                 |    |                      |    |                      |
| 25       |                                                 | 1914  | 10                   | 42.7                              | .673                            | 28.72                              | 10                                             |                      |                 |    |                      |    |                      |
| 26       | 2 plants.....                                   | 1914  | 56                   | 42.7                              | .762                            | 32.65                              | 56                                             |                      |                 |    |                      |    |                      |
| 27       |                                                 | 1915  | 34                   | 42.7                              | .686                            | 29.27                              | 34                                             |                      |                 |    |                      |    |                      |
|          | <b>Sheet heaters' helpers: Pittsburgh—</b>      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 28       | 7 plants.....                                   | 1913  | 170                  | 42.7                              | .499                            | 21.28                              | 170                                            |                      |                 |    |                      |    |                      |
| 29       |                                                 | 1914  | 168                  | 42.7                              | .517                            | 22.05                              | 168                                            |                      |                 |    |                      |    |                      |
| 30       | 8 plants.....                                   | 1914  | 195                  | 42.7                              | .511                            | 21.80                              | 195                                            |                      |                 |    |                      |    |                      |
| 31       |                                                 | 1915  | 168                  | 42.7                              | .487                            | 20.77                              | 168                                            |                      |                 |    |                      |    |                      |
|          | <b>G. L. and M. W.—</b>                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 32       | 3 plants.....                                   | 1913  | 60                   | 43.6                              | .440                            | 19.06                              | 60                                             |                      |                 |    |                      |    |                      |
| 33       |                                                 | 1914  | 62                   | 43.6                              | .433                            | 18.76                              | 62                                             |                      |                 |    |                      |    |                      |
| 34       | 5 plants.....                                   | 1914  | 114                  | 43.2                              | .440                            | 18.92                              | 114                                            |                      |                 |    |                      |    |                      |
| 35       |                                                 | 1915  | 107                  | 43.3                              | .412                            | 17.77                              | 107                                            |                      |                 |    |                      |    |                      |
|          | <b>Total—</b>                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 36       | 10 plants.....                                  | 1913  | 230                  | 42.9                              | .483                            | 20.70                              | 230                                            |                      |                 |    |                      |    |                      |
| 37       |                                                 | 1914  | 230                  | 42.9                              | .494                            | 21.16                              | 230                                            |                      |                 |    |                      |    |                      |
| 38       | 13 plants.....                                  | 1914  | 309                  | 42.8                              | .485                            | 20.73                              | 309                                            |                      |                 |    |                      |    |                      |
| 39       |                                                 | 1915  | 275                  | 42.9                              | .458                            | 19.60                              | 275                                            |                      |                 |    |                      |    |                      |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
MILLS—Continued.

| Employees whose rates of wages per hour were— |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    | Line No. |
|-----------------------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|--------------------|----------|
| 12 and under 14 cents.                        | 14 and under 16 cents. | 16 and under 18 cents. | 18 and under 20 cents. | 20 and under 25 cents. | 25 and under 30 cents. | 30 and under 40 cents. | 40 and under 50 cents. | 50 and under 60 cents. | 60 and under 70 cents. | 70 cents and over. |          |
|                                               |                        |                        |                        | 1                      | 7                      | 109                    | 166                    | 53                     |                        |                    | 1        |
|                                               |                        |                        |                        | 1                      | 12                     | 63                     | 144                    | 104                    | 9                      |                    | 2        |
|                                               |                        |                        |                        | 1                      | 12                     | 64                     | 192                    | 120                    | 10                     |                    | 3        |
|                                               |                        |                        |                        |                        | 2                      | 66                     | 202                    | 73                     | 9                      |                    | 4        |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        | 6                      | 203                | 5        |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        | 3                      | 204                | 6        |
|                                               |                        |                        |                        |                        |                        |                        |                        | 1                      | 4                      | 229                | 7        |
|                                               |                        |                        |                        |                        |                        |                        |                        | 3                      | 27                     | 177                | 8        |
|                                               |                        |                        |                        |                        |                        |                        |                        | 1                      | 8                      | 89                 | 9        |
|                                               |                        |                        |                        |                        |                        |                        |                        | 2                      | 7                      | 85                 | 10       |
|                                               |                        |                        |                        |                        |                        |                        |                        | 2                      | 7                      | 121                | 11       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        | 8                      | 1 9                | 12       |
|                                               |                        |                        |                        |                        |                        |                        |                        | 1                      | 14                     | 292                | 13       |
|                                               |                        |                        |                        |                        |                        |                        |                        | 2                      | 10                     | 289                | 14       |
|                                               |                        |                        |                        |                        |                        |                        |                        | 3                      | 11                     | 353                | 15       |
|                                               |                        |                        |                        |                        |                        |                        |                        | 3                      | 35                     | 236                | 16       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        | 2                      |                    | 17       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        |                        |                    | 18       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        | 2                      | 46                 | 19       |
|                                               |                        |                        |                        |                        |                        |                        |                        | 4                      | 8                      | 12                 | 20       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        | 4                      | 8                  | 21       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        | 6                      | 2                  | 22       |
|                                               |                        |                        |                        |                        |                        |                        |                        | 2                      | 4                      | 4                  | 23       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        | 6                      | 8                  | 24       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        | 6                      | 4                  | 25       |
|                                               |                        |                        |                        |                        |                        |                        |                        |                        | 8                      | 48                 | 26       |
|                                               |                        |                        |                        |                        |                        |                        |                        | 6                      | 12                     | 16                 | 27       |
|                                               |                        |                        |                        |                        |                        | 29                     | 59                     | 57                     | 16                     | 9                  | 28       |
|                                               |                        |                        |                        |                        |                        | 26                     | 51                     | 56                     | 25                     | 10                 | 29       |
|                                               |                        |                        |                        |                        |                        | 29                     | 69                     | 61                     | 25                     | 11                 | 30       |
|                                               |                        |                        |                        |                        |                        | 24                     | 97                     | 28                     | 7                      | 12                 | 31       |
|                                               |                        |                        |                        |                        |                        | 21                     | 19                     | 18                     | 2                      |                    | 32       |
|                                               |                        |                        |                        |                        |                        | 21                     | 20                     | 21                     |                        |                    | 33       |
|                                               |                        |                        |                        |                        | 2                      | 30                     | 52                     | 30                     |                        |                    | 34       |
|                                               |                        |                        |                        |                        |                        | 32                     | 70                     | 5                      |                        |                    | 35       |
|                                               |                        |                        |                        |                        |                        | 50                     | 78                     | 75                     | 18                     | 9                  | 36       |
|                                               |                        |                        |                        |                        |                        | 47                     | 71                     | 77                     | 25                     | 10                 | 37       |
|                                               |                        |                        |                        |                        | 2                      | 59                     | 121                    | 91                     | 25                     | 11                 | 38       |
|                                               |                        |                        |                        |                        |                        | 56                     | 167                    | 33                     | 7                      | 12                 | 39       |

TABLE R.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—SHEET

|    | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |  |
|----|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|--|
|    |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |  |
|    |                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |  |
| 1  | Shearmen:                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |  |
| 2  | Pittsburgh—                       |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |  |
| 3  | 5 plants.....                     | 1913  | 83                   | 42.7                              | \$0.818                         | \$34.91                            | 83                                             |                      |                 |    |                      |    |                      |    |  |
| 4  |                                   | 1914  | 83                   | 42.7                              | .844                            | 36.03                              | 83                                             |                      |                 |    |                      |    |                      |    |  |
| 5  | 6 plants.....                     | 1914  | 92                   | 42.7                              | .860                            | 36.72                              | 92                                             |                      |                 |    |                      |    |                      |    |  |
| 6  |                                   | 1915  | 75                   | 42.7                              | .845                            | 36.09                              | 75                                             |                      |                 |    |                      |    |                      |    |  |
| 7  | G. L. and M. W.—                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |  |
| 8  | 3 plants.....                     | 1913  | 31                   | 43.4                              | .805                            | 34.87                              | 31                                             |                      |                 |    |                      |    |                      |    |  |
| 9  |                                   | 1914  | 31                   | 43.4                              | .816                            | 35.34                              | 31                                             |                      |                 |    |                      |    |                      |    |  |
| 10 | 4 plants.....                     | 1914  | 44                   | 43.2                              | .860                            | 37.09                              | 44                                             |                      |                 |    |                      |    |                      |    |  |
| 11 |                                   | 1915  | 40                   | 43.5                              | .792                            | 34.34                              | 40                                             |                      |                 |    |                      |    |                      |    |  |
| 12 | Total—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |  |
| 13 | 8 plants.....                     | 1913  | 114                  | 42.9                              | .814                            | 34.90                              | 114                                            |                      |                 |    |                      |    |                      |    |  |
| 14 |                                   | 1914  | 114                  | 42.9                              | .836                            | 35.84                              | 114                                            |                      |                 |    |                      |    |                      |    |  |
| 15 | 10 plants.....                    | 1914  | 136                  | 42.9                              | .860                            | 36.84                              | 136                                            |                      |                 |    |                      |    |                      |    |  |
| 16 |                                   | 1915  | 115                  | 43.0                              | .827                            | 35.48                              | 115                                            |                      |                 |    |                      |    |                      |    |  |
| 17 | Shearmen's helpers:               |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |  |
| 18 | Pittsburgh—                       |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |  |
| 19 | 4 plants.....                     | 1913  | 61                   | 42.7                              | .261                            | 11.13                              | 61                                             |                      |                 |    |                      |    |                      |    |  |
| 20 |                                   | 1914  | 58                   | 42.7                              | .259                            | 11.04                              | 58                                             |                      |                 |    |                      |    |                      |    |  |
| 21 | 5 plants.....                     | 1914  | 82                   | 42.7                              | .247                            | 10.54                              | 82                                             |                      |                 |    |                      |    |                      |    |  |
| 22 |                                   | 1915  | 87                   | 44.2                              | .238                            | 10.53                              | 80                                             | 3                    |                 |    |                      | 4  |                      |    |  |
| 23 | G. L. and M. W.—                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |  |
| 24 | 3 plants.....                     | 1913  | 50                   | 43.1                              | .239                            | 10.33                              | 50                                             |                      |                 |    |                      |    |                      |    |  |
| 25 |                                   | 1914  | 33                   | 43.4                              | .344                            | 14.91                              | 33                                             |                      |                 |    |                      |    |                      |    |  |
| 26 | 4 plants.....                     | 1914  | 46                   | 43.2                              | .344                            | 14.84                              | 46                                             |                      |                 |    |                      |    |                      |    |  |
| 27 |                                   | 1915  | 59                   | 43.2                              | .246                            | 10.68                              | 59                                             |                      |                 |    |                      |    |                      |    |  |
| 28 | Total—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |  |
| 29 | 7 plants.....                     | 1913  | 111                  | 42.9                              | .251                            | 10.77                              | 111                                            |                      |                 |    |                      |    |                      |    |  |
| 30 |                                   | 1914  | 91                   | 43.0                              | .290                            | 12.45                              | 91                                             |                      |                 |    |                      |    |                      |    |  |
| 31 | 9 plants.....                     | 1914  | 128                  | 42.9                              | .282                            | 12.09                              | 128                                            |                      |                 |    |                      |    |                      |    |  |
| 32 |                                   | 1915  | 146                  | 43.8                              | .242                            | 10.59                              | 139                                            | 3                    |                 |    |                      | 4  |                      |    |  |
| 33 | Openers:                          |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |  |
| 34 | Pittsburgh—                       |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |  |
| 35 | 4 plants.....                     | 1913  | 113                  | 42.7                              | .295                            | 12.59                              | 113                                            |                      |                 |    |                      |    |                      |    |  |
| 36 |                                   | 1914  | 111                  | 42.7                              | .287                            | 12.24                              | 111                                            |                      |                 |    |                      |    |                      |    |  |
| 37 | 5 plants.....                     | 1914  | 135                  | 42.7                              | .282                            | 12.02                              | 135                                            |                      |                 |    |                      |    |                      |    |  |
| 38 |                                   | 1915  | 123                  | 43.7                              | .270                            | 11.84                              | 116                                            | 3                    |                 |    |                      | 4  |                      |    |  |
| 39 | G. L. and M. W.—                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |  |
| 40 | 3 plants.....                     | 1913  | 48                   | 43.2                              | .280                            | 12.11                              | 48                                             |                      |                 |    |                      |    |                      |    |  |
| 41 |                                   | 1914  | 48                   | 43.2                              | .272                            | 11.74                              | 48                                             |                      |                 |    |                      |    |                      |    |  |
| 42 | 4 plants.....                     | 1914  | 65                   | 43.0                              | .282                            | 12.16                              | 65                                             |                      |                 |    |                      |    |                      |    |  |
| 43 |                                   | 1915  | 57                   | 43.2                              | .280                            | 12.12                              | 57                                             |                      |                 |    |                      |    |                      |    |  |
| 44 | Total—                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |  |
| 45 | 7 plants.....                     | 1913  | 161                  | 42.8                              | .291                            | 12.45                              | 161                                            |                      |                 |    |                      |    |                      |    |  |
| 46 |                                   | 1914  | 159                  | 42.8                              | .282                            | 12.09                              | 159                                            |                      |                 |    |                      |    |                      |    |  |
| 47 | 9 plants.....                     | 1914  | 200                  | 42.8                              | .282                            | 12.06                              | 200                                            |                      |                 |    |                      |    |                      |    |  |
| 48 |                                   | 1915  | 180                  | 43.6                              | .273                            | 11.93                              | 173                                            | 3                    |                 |    |                      | 4  |                      |    |  |
| 49 | Picklers:                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |  |
| 50 | Pittsburgh—                       |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |  |
| 51 | 5 plants.....                     | 1913  | 38                   | 65.4                              | .223                            | 14.13                              | 8                                              |                      |                 |    |                      | 5  |                      | 25 |  |
| 52 |                                   | 1914  | 41                   | 65.9                              | .219                            | 14.02                              | 8                                              |                      |                 |    |                      | 5  |                      | 28 |  |
| 53 | 5 plants.....                     | 1914  | 41                   | 65.3                              | .221                            | 14.02                              | 8                                              |                      |                 |    |                      | 5  | 6                    | 22 |  |
| 54 |                                   | 1915  | 48                   | 66.7                              | .212                            | 13.73                              | 8                                              |                      |                 |    |                      | 4  | 4                    | 32 |  |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
MILLS—Continued.

| Employees whose rates of wages per hour were— |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | Line<br>No. |
|-----------------------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------|-------------|
| 12 and<br>under<br>14<br>cents.               | 14 and<br>under<br>16<br>cents. | 16 and<br>under<br>18<br>cents. | 18 and<br>under<br>20<br>cents. | 20 and<br>under<br>25<br>cents. | 25 and<br>under<br>30<br>cents. | 30 and<br>under<br>40<br>cents. | 40 and<br>under<br>50<br>cents. | 50 and<br>under<br>60<br>cents. | 60 and<br>under<br>70<br>cents. | 70 cents<br>and<br>over. |             |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 | 1                               | 2                               | 10                              | 13                              | 57                       | 1           |
|                                               |                                 |                                 |                                 |                                 |                                 | 3                               | 1                               | 10                              | 8                               | 61                       | 2           |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 | 3                               | 1                               | 7                               | 10                              | 71                       | 3           |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 4                               | 1                               | 20                              | 50                       | 4           |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 1                               | 8                               | 22                       | 5           |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 3                               | 2                               | 26                       | 6           |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 3                               | 3                               | 38                       | 7           |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 | 1                               | 6                               | 33                       | 8           |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 | 1                               | 2                               | 11                              | 21                              | 79                       | 9           |
|                                               |                                 |                                 |                                 |                                 |                                 | 3                               | 1                               | 13                              | 10                              | 87                       | 10          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 | 3                               | 1                               | 10                              | 13                              | 109                      | 11          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 | 4                               | 2                               | 26                              | 83                       | 12          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 | 1                               | 17                              | 38                              | 5                               |                                 |                                 |                          | 13          |
|                                               |                                 |                                 |                                 | 2                               | 19                              | 29                              | 8                               |                                 |                                 |                          | 14          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 | 10                              | 30                              | 34                              | 8                               |                                 |                                 |                                 |                          | 15          |
|                                               | 3                               |                                 | 5                               | 40                              | 36                              | 2                               |                                 |                                 |                                 |                          | 16          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 | 5                               | 11                              | 17                              | 3                               | 14                              |                                 |                                 |                                 |                          | 17          |
|                                               |                                 |                                 |                                 | 1                               | 2                               | 25                              | 5                               |                                 |                                 |                          | 18          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 | 5                               | 17                              | 1                               | 2                               | 38                              | 5                               |                                 |                                 |                          | 19          |
|                                               |                                 |                                 |                                 | 11                              | 2                               | 24                              |                                 |                                 |                                 |                          | 20          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 | 5                               |                                 | 12                              | 34                              | 41                              | 19                              |                                 |                                 |                          | 21          |
|                                               |                                 |                                 |                                 | 2                               | 20                              | 31                              | 33                              | 5                               |                                 |                          | 22          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 | 10                              | 31                              | 36                              | 46                              | 5                               |                                 |                                 |                          | 23          |
|                                               | 3                               | 6                               | 22                              | 51                              | 38                              | 26                              |                                 |                                 |                                 |                          | 24          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 | 5                               | 74                              | 32                              | 2                               |                                 |                          | 25          |
|                                               |                                 |                                 |                                 |                                 | 6                               | 85                              | 20                              |                                 |                                 |                          | 26          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 | 1                               | 14                              | 97                              | 23                              |                                 |                                 |                          | 27          |
|                                               | 7                               | 2                               | 1                               |                                 | 17                              | 62                              | 33                              | 1                               |                                 |                          | 28          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 | 12                              | 18                              | 18                              |                                 |                                 |                          | 29          |
|                                               |                                 |                                 |                                 |                                 | 19                              | 14                              | 15                              |                                 |                                 |                          | 30          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 | 19                              | 14                              | 32                              |                                 |                                 |                          | 31          |
|                                               |                                 |                                 |                                 |                                 | 13                              | 19                              | 25                              |                                 |                                 |                          | 32          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 | 17                              | 92                              | 50                              | 2                               |                                 |                          | 33          |
|                                               |                                 |                                 |                                 |                                 | 25                              | 99                              | 35                              |                                 |                                 |                          | 34          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 | 1                               | 33                              | 111                             | 55                              |                                 |                                 |                          | 35          |
|                                               | 7                               | 2                               | 1                               |                                 | 30                              | 81                              | 58                              | 1                               |                                 |                          | 36          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 | 17                              |                                 | 6                               | 7                               | 8                               |                                 |                                 |                          | 37          |
|                                               |                                 |                                 | 20                              |                                 | 6                               | 7                               | 8                               |                                 |                                 |                          | 38          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 |                                 | 20                              |                                 | 6                               | 7                               | 8                               |                                 |                                 |                          | 39          |
|                                               |                                 |                                 | 30                              |                                 |                                 | 10                              | 8                               |                                 |                                 |                          | 40          |

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TABLE R.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR,  
1913 TO 1915—SHEET

| Line No. | Occupation, and number of plants.                            | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                       |                  |     |                       |     |                       |     |
|----------|--------------------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|-----------------------|------------------|-----|-----------------------|-----|-----------------------|-----|
|          |                                                              |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56. | 56 and under 60. | 60. | Over 60 and under 72. | 72. | Over 72 and under 84. | 84. |
| 1        | Pick'ers—Concluded.<br>G. L. and M. W.—<br>3 plants.....     | 1913  | 33                   | 71.3                              | \$0.209                         | \$14.90                            |                                                |                       |                  |     | 6                     | 27  |                       |     |
|          |                                                              | 1914  | 30                   | 71.5                              | .209                            | 14.94                              |                                                |                       |                  |     | 4                     | 26  |                       |     |
| 3        | 4 plants.....                                                | 1914  | 80                   | 71.8                              | .207                            | 14.82                              |                                                |                       |                  |     | 4                     | 76  |                       |     |
|          |                                                              | 1915  | 78                   | 71.8                              | .207                            | 14.88                              |                                                |                       |                  |     | 4                     | 74  |                       |     |
| 5        | Total—<br>8 plants.....                                      | 1913  | 71                   | 68.1                              | .216                            | 14.49                              | 8                                              |                       |                  | 5   | 6                     | 52  |                       |     |
|          |                                                              | 1914  | 71                   | 68.2                              | .215                            | 14.40                              | 8                                              |                       |                  | 5   | 4                     | 54  |                       |     |
| 7        | 9 plants.....                                                | 1914  | 121                  | 69.6                              | .211                            | 14.55                              | 8                                              |                       |                  | 5   | 10                    | 98  |                       |     |
|          |                                                              | 1915  | 125                  | 69.8                              | .209                            | 14.44                              | 8                                              |                       |                  | 4   | 8                     | 105 |                       |     |
| 9        | Laborers:<br>Pittsburgh—<br>9 plants.....                    | 1913  | 256                  | 64.7                              | .191                            | 12.32                              |                                                |                       | 18               | 117 | 34                    | 85  | 2                     |     |
|          |                                                              | 1914  | 200                  | 66.5                              | .190                            | 12.64                              |                                                | 1                     | 3                | 45  | 84                    | 53  | 9                     | 5   |
| 11       | 10 plants.....                                               | 1914  | 258                  | 65.8                              | .192                            | 12.57                              |                                                | 1                     | 3                | 85  | 102                   | 53  | 9                     | 5   |
|          |                                                              | 1915  | 285                  | 65.0                              | .192                            | 12.43                              |                                                | 1                     |                  | 110 | 108                   | 21  | 30                    | 5   |
| 13       | G. L. and M. W.—<br>4 plants.....                            | 1913  | 95                   | 65.4                              | .187                            | 12.17                              |                                                |                       | 40               | 14  | 13                    | 13  | 12                    | 3   |
|          |                                                              | 1914  | 86                   | 64.1                              | .188                            | 12.06                              |                                                |                       | 35               | 15  | 19                    | 13  | 2                     | 2   |
| 15       | 5 plants.....                                                | 1914  | 120                  | 66.4                              | .180                            | 11.91                              |                                                |                       | 25               | 15  | 19                    | 47  | 2                     | 2   |
|          |                                                              | 1915  | 109                  | 65.0                              | .180                            | 11.62                              |                                                |                       | 40               | 17  | 12                    | 38  | 2                     |     |
| 17       | Total—<br>13 plants.....                                     | 1913  | 351                  | 64.9                              | .190                            | 12.28                              |                                                |                       | 58               | 131 | 47                    | 98  | 14                    | 3   |
|          |                                                              | 1914  | 286                  | 65.9                              | .190                            | 12.46                              |                                                | 1                     | 38               | 60  | 103                   | 66  | 11                    | 7   |
| 19       | 15 plants.....                                               | 1914  | 378                  | 65.9                              | .188                            | 12.37                              |                                                | 1                     | 38               | 100 | 121                   | 100 | 11                    | 7   |
|          |                                                              | 1915  | 394                  | 65.0                              | .188                            | 12.21                              |                                                | 1                     | 40               | 127 | 120                   | 69  | 32                    | 5   |
| 21       | Unclassified—productive:<br>Pittsburgh—<br>9 plants.....     | 1914  | 920                  | 65.7                              | .215                            | 14.10                              | 4                                              | 1                     | 78               | 274 | 222                   | 235 | 21                    | 48  |
|          |                                                              | 1915  | 794                  | 65.0                              | .215                            | 12.93                              | 39                                             | 1                     | 25               | 310 | 192                   | 145 | 32                    | 50  |
| 23       | G. L. and M. W.—<br>4 plants.....                            | 1914  | 525                  | 68.0                              | .206                            | 13.97                              | 42                                             | 6                     | 20               | 27  | 123                   | 263 | 37                    | 2   |
|          |                                                              | 1915  | 413                  | 67.8                              | .204                            | 13.78                              | 23                                             | 3                     | 21               | 14  | 14                    | 190 | 21                    | 2   |
| 25       | Total—<br>13 plants.....                                     | 1914  | 1,445                | 66.5                              | .212                            | 14.05                              | 83                                             | 7                     | 98               | 301 | 350                   | 498 | 58                    | 50  |
|          |                                                              | 1915  | 1,207                | 66.0                              | .211                            | 13.88                              | 67                                             | 4                     | 46               | 324 | 226                   | 335 | 53                    | 52  |
| 27       | Unclassified—non-productive:<br>Pittsburgh—<br>9 plants..... | 1914  | 406                  | 69.3                              | .208                            | 14.47                              |                                                |                       | 10               | 45  | 153                   | 121 | 20                    | 57  |
|          |                                                              | 1915  | 482                  | 68.6                              | .207                            | 14.24                              |                                                |                       | 2                | 65  | 223                   | 110 | 26                    | 52  |
| 29       | G. L. and M. W.—<br>4 plants.....                            | 1914  | 108                  | 68.7                              | .206                            | 14.18                              |                                                |                       |                  | 40  | 17                    | 25  | 21                    | 5   |
|          |                                                              | 1915  | 107                  | 68.6                              | .205                            | 14.27                              |                                                |                       |                  | 37  | 21                    | 31  | 11                    | 7   |
| 31       | Total—<br>13 plants.....                                     | 1914  | 514                  | 69.2                              | .208                            | 14.41                              |                                                |                       | 10               | 85  | 170                   | 146 | 41                    | 62  |
|          |                                                              | 1915  | 589                  | 68.6                              | .207                            | 14.25                              |                                                |                       | 2                | 103 | 250                   | 141 | 37                    | 53  |

AND FULL-TIME WEEKLY EARNINGS, IN EACH DISTRICT, BY YEARS,  
MILLS—Concluded.

| Employees whose rates of wages per hour were— |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          | Line<br>No. |
|-----------------------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------|-------------|
| 12 and<br>under<br>14<br>cents.               | 14 and<br>under<br>16<br>cents. | 16 and<br>under<br>18<br>cents. | 18 and<br>under<br>20<br>cents. | 20 and<br>under<br>25<br>cents. | 25 and<br>under<br>30<br>cents. | 30 and<br>under<br>40<br>cents. | 40 and<br>under<br>50<br>cents. | 50 and<br>under<br>60<br>cents. | 60 and<br>under<br>70<br>cents. | 70 cents<br>and<br>over. |             |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 | 2                               | 1                               | 30                              |                                 |                                 |                                 |                                 |                                 |                          | 1           |
|                                               |                                 | 2                               |                                 | 28                              |                                 |                                 |                                 |                                 |                                 |                          | 2           |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 | 2                               |                                 | 78                              |                                 |                                 |                                 |                                 |                                 |                          | 3           |
|                                               |                                 |                                 |                                 | 78                              |                                 |                                 |                                 |                                 |                                 |                          | 4           |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 | 1                               | 1                               | 36                              | 7                               | 8                               |                                 |                                 |                                 |                          | 5           |
|                                               |                                 | 22                              |                                 | 31                              | 7                               | 8                               |                                 |                                 |                                 |                          | 6           |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 | 22                              |                                 | 84                              | 7                               | 8                               |                                 |                                 |                                 |                          | 7           |
|                                               |                                 | 30                              |                                 | 78                              | 10                              | 8                               |                                 |                                 |                                 |                          | 8           |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 | 3                               | 299                             | 10                              |                                 |                                 |                                 |                                 |                                 |                          | 9           |
|                                               |                                 | 31                              | 163                             | 3                               |                                 |                                 |                                 |                                 |                                 |                          | 10          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 | 31                              | 273                             | 21                              |                                 |                                 |                                 |                                 |                                 |                          | 11          |
|                                               |                                 | 30                              | 23                              | 11                              |                                 |                                 |                                 |                                 |                                 |                          | 12          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 | 38                              | 5                               |                                 |                                 |                                 |                                 |                                 |                                 |                          | 13          |
|                                               |                                 | 26                              | 63                              |                                 |                                 |                                 |                                 |                                 |                                 |                          | 14          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 | 60                              | 63                              |                                 |                                 |                                 |                                 |                                 |                                 |                          | 15          |
|                                               |                                 | 5                               | 52                              |                                 |                                 |                                 |                                 |                                 |                                 |                          | 16          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 | 75                              | 266                             | 10                              |                                 |                                 |                                 |                                 |                                 |                          | 17          |
|                                               |                                 | 60                              | 223                             | 3                               |                                 |                                 |                                 |                                 |                                 |                          | 18          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 | 94                              | 263                             | 21                              |                                 |                                 |                                 |                                 |                                 |                          | 19          |
|                                               |                                 | 96                              | 28                              | 11                              |                                 |                                 |                                 |                                 |                                 |                          | 20          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 | 2                               | 94                              | 316                             | 354                             | 116                             | 32                              | 1                               | 1                               | 4                        | 21          |
|                                               |                                 | 2                               | 122                             | 226                             | 29                              | 114                             | 28                              | 2                               | 3                               |                          | 22          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 | 82                              | 183                             | 190                             | 65                              | 5                               |                                 |                                 |                                 |                          | 23          |
|                                               |                                 | 87                              | 125                             | 148                             | 46                              | 7                               |                                 |                                 |                                 |                          | 24          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 | 2                               | 176                             | 499                             | 544                             | 181                             | 37                              | 1                               | 1                               | 4                        | 25          |
|                                               |                                 | 2                               | 239                             | 351                             | 445                             | 160                             | 37                              | 2                               | 3                               |                          | 26          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 | 1                               | 36                              | 232                             | 95                              | 19                              | 23                              |                                 |                                 |                          | 27          |
|                                               |                                 | 1                               | 61                              | 271                             | 101                             | 26                              | 21                              |                                 | 1                               |                          | 28          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 | 10                              | 52                              | 35                              | 8                               | 3                               |                                 |                                 |                                 |                          | 29          |
|                                               |                                 | 2                               | 16                              | 53                              | 19                              | 11                              | 4                               |                                 |                                 |                          | 30          |
|                                               |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                          |             |
|                                               |                                 | 1                               | 46                              | 284                             | 130                             | 2                               | 26                              |                                 |                                 |                          | 31          |
|                                               |                                 | 3                               | 77                              | 324                             | 120                             | 3                               | 25                              | 1                               | 1                               |                          | 32          |

# TIN-PLATE MILLS.<sup>1</sup>

## SUMMARY.

The average rate of wages or earnings per hour of tin-plate mill employees in 1915 was higher than in any one of the preceding five years reported, and, as full-time hours per week were unchanged, full-time weekly earnings followed the same course as earnings per hour, being 22 per cent higher than in 1910, 9 per cent higher than in 1911, 8 per cent higher than in 1912, 3 per cent higher than in 1913, and 1 per cent higher than in 1914. These facts are drawn from the table of relative numbers for "All occupations" (Table 43).

The most significant details appearing in this chapter concerning wages and hours of labor of tin-plate mill employees for the years 1910 to 1915 are summarized by means of averages and percentages in Table 42. The information for 1915 represents 6,147 employees, and was obtained from 11 plants having 135 hot mills and capable of producing 37 per cent of the total tonnage of all tin-plate mills in the United States. Of the 6,147 employees 4,468 are in the 17 principal productive occupations reported for the years 1910 to 1913, and the remaining 1,679 are in the unclassified productive and nonproductive groups reported for the years 1914 and 1915 only.

In Table 42 occupations are grouped according to the wages paid, beginning with the lowest paid group, and the occupations in each group are presented in alphabetical order. Classified full-time hours per week and rates of wages per hour are shown by percentages which were computed from the actual figures given in Table S.

TABLE 42.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, BY OCCUPATIONS, 1910 TO 1915—*TIN-PLATE MILLS.*

[The figures for each group of years are for identical plants.]

| Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                       |                  |    |          | Average rate of wages per hour. | Percent of employees whose earnings per hour were— |                      |                      |                      |                   | Average full-time weekly earnings. |
|-----------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|-----------------------|------------------|----|----------|---------------------------------|----------------------------------------------------|----------------------|----------------------|----------------------|-------------------|------------------------------------|
|                                   |       |                      |                                   | 48 and under.                                              | Over 48 and under 56. | 56 and under 60. | 60 | Over 60. |                                 | Under 14 cts.                                      | 14 and under 16 cts. | 16 and under 18 cts. | 18 and under 20 cts. | 20 cts. and over. |                                    |
| Assorters, female:                |       |                      |                                   |                                                            |                       |                  |    |          |                                 |                                                    |                      |                      |                      |                   |                                    |
| 4 plants.....                     | 1910  | 101                  | 49.7                              | 46                                                         | 8                     | 47               |    |          | \$0.128                         | 92                                                 | 8                    |                      |                      |                   | \$6.41                             |
|                                   | 1911  | 112                  | 50.2                              | 41                                                         | 8                     | 51               |    |          | .138                            | 92                                                 | 3                    |                      |                      | 5                 | 6.97                               |
| 5 plants.....                     | 1911  | 120                  | 50.7                              | 38                                                         | 8                     | 54               |    |          | .138                            | 93                                                 | 3                    |                      |                      | 5                 | 7.03                               |
|                                   | 1912  | 127                  | 51.4                              | 37                                                         | 4                     | 59               |    |          | .145                            | 69                                                 | 1                    | 27                   | 3                    |                   | 7.39                               |
|                                   | 1913  | 120                  | 51.5                              | 35                                                         | 5                     | 60               |    |          | .163                            | 8                                                  | 1                    | 87                   | 3                    | 2                 | 8.37                               |
| 6 plants.....                     | 1913  | 171                  | 53.7                              | 25                                                         | 4                     | 72               |    |          | .163                            | 2                                                  | 4                    | 91                   | 2                    | 1                 | 8.75                               |
|                                   | 1914  | 172                  | 53.3                              | 27                                                         | 3                     | 69               |    |          | .153                            | 27                                                 | 3                    | 69                   |                      | 1                 | 8.26                               |
|                                   | 1915  | 208                  | 55.4                              | 23                                                         | 3                     | 74               |    |          | .162                            | 4                                                  | 4                    | 89                   |                      | 3                 | 8.98                               |

<sup>1</sup> Summary figures relating to this department are given with figures for other departments of the iron and steel industry on pages 7 to 26; an account of the volume of employment in this and other departments from July, 1913, to June, 1915, is given on pages 26 to 55; and an explanation of the scope of the investigation and of the methods employed is given on pages 55 to 59.



TABLE 42.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, BY OCCUPATIONS, 1910 TO 1915—TIN-PLATE MILLS—Continued.

| Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |                 |    |         | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                   | Average full-time weekly earnings. |
|-----------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|----------------------|-----------------|----|---------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|-------------------|------------------------------------|
|                                   |       |                      |                                   | 48 and under.                                              | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 |                                 | Under 14 cts.                                       | 14 and under 16 cts. | 16 and under 18 cts. | 18 and under 20 cts. | 20 cts. and over. |                                    |
| <b>Brannery:</b>                  |       |                      |                                   |                                                            |                      |                 |    |         |                                 |                                                     |                      |                      |                      |                   |                                    |
| 2 plants.....                     | 1910  | 12                   | 67.8                              |                                                            |                      |                 |    | 100     | \$0.170                         |                                                     |                      | 100                  |                      |                   | \$11.52                            |
|                                   | 1911  | 20                   | 67.7                              |                                                            |                      |                 |    | 100     | .170                            |                                                     |                      |                      |                      |                   | 11.50                              |
|                                   | 1912  | 16                   | 67.7                              |                                                            |                      |                 |    | 100     | .170                            |                                                     |                      | 100                  |                      |                   | 11.51                              |
|                                   | 1913  | 17                   | 67.7                              |                                                            |                      |                 |    | 100     | .195                            |                                                     |                      |                      | 100                  |                   | 13.20                              |
| 4 plants.....                     | 1913  | 37                   | 63.7                              |                                                            |                      | 43              |    | 57      | .190                            |                                                     |                      |                      | 100                  |                   | 12.14                              |
|                                   | 1914  | 41                   | 64.1                              |                                                            |                      | 39              |    | 61      | .198                            |                                                     |                      |                      | 61                   | 39                | 12.69                              |
|                                   | 1915  | 34                   | 65.4                              |                                                            |                      | 24              |    | 76      | .203                            |                                                     |                      |                      | 76                   | 24                | 13.22                              |
| <b>Laborers:</b>                  |       |                      |                                   |                                                            |                      |                 |    |         |                                 |                                                     |                      |                      |                      |                   |                                    |
| 4 plants.....                     | 1910  | 191                  | 60.6                              |                                                            |                      | 53              | 24 | 23      | .165                            |                                                     | 27                   | 73                   |                      |                   | 9.97                               |
|                                   | 1911  | 201                  | 60.4                              |                                                            | 5                    | 39              | 36 | 20      | .163                            | 3                                                   | 31                   | 65                   |                      |                   | 9.84                               |
| 5 plants.....                     | 1911  | 238                  | 61.0                              |                                                            | 4                    | 33              | 38 | 25      | .164                            | 3                                                   | 26                   | 71                   |                      |                   | 10.01                              |
|                                   | 1912  | 239                  | 61.3                              |                                                            | (1)                  | 35              | 41 | 24      | .169                            |                                                     | 4                    | 96                   |                      |                   | 10.37                              |
| 6 plants.....                     | 1912  | 276                  | 61.6                              |                                                            |                      | 30              | 43 | 27      | .167                            |                                                     | 9                    | 91                   |                      |                   | 10.32                              |
|                                   | 1913  | 322                  | 61.1                              |                                                            |                      | 33              | 31 | 33      | .190                            |                                                     | 3                    | 13                   | 85                   |                   | 11.63                              |
| 9 plants.....                     | 1913  | 575                  | 61.6                              |                                                            |                      | 24              | 18 | 58      | .189                            |                                                     | (1)                  | 6                    | 92                   | 2                 | 11.64                              |
|                                   | 1914  | 469                  | 62.4                              |                                                            |                      | 12              | 16 | 72      | .189                            |                                                     | 1                    | 7                    | 91                   | 1                 | 11.78                              |
|                                   | 1915  | 444                  | 61.6                              |                                                            |                      | 33              | 16 | 51      | .190                            |                                                     | (1)                  | 3                    | 92                   | 5                 | 11.72                              |
| <b>Shearmen's helpers:</b>        |       |                      |                                   |                                                            |                      |                 |    |         |                                 |                                                     |                      |                      |                      |                   |                                    |
| 2 plants.....                     | 1910  | 25                   | 61.8                              |                                                            |                      |                 | 80 | 20      | .118                            | 80                                                  | 20                   |                      |                      |                   | 7.31                               |
|                                   | 1911  | 31                   | 59.7                              |                                                            |                      | 26              | 74 |         | .118                            | 97                                                  | 3                    |                      |                      |                   | 7.02                               |
|                                   | 1912  | 29                   | 58.8                              |                                                            | 24                   |                 | 76 |         | .123                            | 76                                                  | 17                   | 7                    |                      |                   | 7.18                               |
| 3 plants.....                     | 1912  | 35                   | 57.6                              | 14                                                         | 20                   |                 | 63 | 3       | .136                            | 63                                                  | 14                   | 9                    | 3                    | 11                | 7.71                               |
|                                   | 1913  | 38                   | 58.7                              | 21                                                         |                      |                 | 61 | 18      | .165                            | 32                                                  | 29                   | 18                   |                      | 21                | 9.51                               |
| 4 plants.....                     | 1913  | 43                   | 55.8                              | 19                                                         | 51                   |                 | 14 | 16      | .165                            | 7                                                   | 58                   | 16                   |                      | 19                | 9.13                               |
|                                   | 1914  | 42                   | 55.3                              | 17                                                         | 52                   |                 | 14 | 17      | .168                            | 7                                                   | 60                   | 17                   |                      | 17                | 9.18                               |
| 3 plants.....                     | 1914  | 35                   | 56.7                              |                                                            | 63                   |                 | 17 | 20      | .150                            | 9                                                   | 71                   | 20                   |                      |                   | 8.53                               |
|                                   | 1915  | 33                   | 56.5                              |                                                            | 67                   |                 | 15 | 18      | .150                            | 6                                                   | 76                   | 18                   |                      |                   | 8.51                               |
|                                   |       |                      |                                   |                                                            |                      |                 |    |         |                                 | Under 20 cts.                                       | 20 and under 25 cts. | 25 and under 30 cts. | 30 and under 40 cts. | 40 cts. and over. |                                    |
| <b>Assorters, male:</b>           |       |                      |                                   |                                                            |                      |                 |    |         |                                 |                                                     |                      |                      |                      |                   |                                    |
| 1 plant.....                      | 1911  | 2                    | 55.0                              |                                                            | 100                  |                 |    |         | .263                            |                                                     |                      | 100                  |                      |                   | 14.44                              |
|                                   | 1912  | 2                    | 55.0                              |                                                            | 100                  |                 |    |         | .275                            |                                                     |                      | 50                   | 50                   |                   | 15.13                              |
| <b>Doublers' helpers:</b>         |       |                      |                                   |                                                            |                      |                 |    |         |                                 |                                                     |                      |                      |                      |                   |                                    |
| 5 plants.....                     | 1910  | 174                  | 42.7                              | 100                                                        |                      |                 |    |         | .324                            |                                                     |                      | 34                   | 66                   |                   | 13.82                              |
|                                   | 1911  | 179                  | 42.7                              | 100                                                        |                      |                 |    |         | .353                            |                                                     |                      |                      | 100                  |                   | 15.05                              |
| 6 plants.....                     | 1911  | 191                  | 42.7                              | 100                                                        |                      |                 |    |         | .351                            |                                                     |                      |                      | 100                  |                   | 14.97                              |
|                                   | 1912  | 193                  | 42.7                              | 100                                                        |                      |                 |    |         | .370                            |                                                     |                      | 1                    | 87                   | 12                | 15.81                              |
|                                   | 1913  | 190                  | 42.7                              | 100                                                        |                      |                 |    |         | .393                            |                                                     |                      |                      | 48                   | 52                | 16.77                              |
| 10 plants.....                    | 1913  | 344                  | 42.7                              | 100                                                        |                      |                 |    |         | .362                            |                                                     | 1                    | 14                   | 63                   | 22                | 15.43                              |
|                                   | 1914  | 330                  | 42.7                              | 100                                                        |                      |                 |    |         | .387                            |                                                     | 1                    | 7                    | 50                   | 42                | 16.49                              |
| 10 plants.....                    | 1914  | 322                  | 42.7                              | 100                                                        |                      |                 |    |         | .380                            |                                                     | 1                    | 7                    | 53                   | 39                | 16.21                              |
|                                   | 1915  | 324                  | 42.7                              | 100                                                        |                      |                 |    |         | .402                            |                                                     |                      |                      | 48                   | 52                | 17.17                              |
| <b>Openers, male:</b>             |       |                      |                                   |                                                            |                      |                 |    |         |                                 |                                                     |                      |                      |                      |                   |                                    |
| 3 plants.....                     | 1910  | 94                   | 57.5                              |                                                            | 16                   | 84              |    |         | .221                            | 20                                                  | 80                   |                      |                      |                   | 12.72                              |
|                                   | 1911  | 76                   | 57.3                              |                                                            | 25                   | 75              |    |         | .262                            |                                                     | 25                   | 75                   |                      |                   | 15.02                              |
| 4 plants.....                     | 1911  | 84                   | 57.3                              |                                                            | 23                   | 77              |    |         | .266                            |                                                     | 23                   | 77                   |                      |                   | 15.24                              |
|                                   | 1912  | 89                   | 57.5                              |                                                            | 16                   | 84              |    |         | .298                            |                                                     |                      | 39                   | 61                   |                   | 17.12                              |
| 5 plants.....                     | 1912  | 93                   | 56.9                              | 4                                                          | 15                   | 81              |    |         | .296                            |                                                     | 1                    | 40                   | 59                   |                   | 16.86                              |
|                                   | 1913  | 97                   | 57.7                              |                                                            | 17                   | 75              | 8  |         | .310                            | 6                                                   | 2                    | 17                   | 75                   |                   | 17.89                              |

<sup>1</sup> Less than one-half of 1 per cent.

TABLE 42.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, BY OCCUPATIONS, 1910 TO 1915—*TIN-PLATE MILLS*—Continued.

| Occupation, and number of plants.          | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                       |                  |       |          | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                   | Average full-time weekly earnings. |
|--------------------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|-----------------------|------------------|-------|----------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|-------------------|------------------------------------|
|                                            |       |                      |                                   | 48 and under.                                              | Over 48 and under 56. | 56 and under 60. | 60.   | Over 60. |                                 | Under 20 cts.                                       | 20 and under 25 cts. | 25 and under 30 cts. | 30 and under 40 cts. | 40 cts. and over. |                                    |
|                                            |       |                      |                                   |                                                            |                       |                  |       |          |                                 |                                                     |                      |                      |                      |                   |                                    |
| Openers, male—Con. 7 plants.....           | 1913  | 210                  | 56.9                              | .....                                                      | 30                    | 70               | ..... | .....    | \$0.274                         | .....                                               | 39                   | 18                   | 43                   | .....             | \$15.58                            |
|                                            | 1914  | 201                  | 56.8                              | .....                                                      | 31                    | 69               | ..... | .....    | .266                            | .....                                               | 44                   | 15                   | 41                   | .....             | 15.14                              |
|                                            | 1915  | 227                  | 57.2                              | .....                                                      | 25                    | 68               | 7     | .....    | .247                            | 4                                                   | 68                   | 9                    | 19                   | .....             | 14.13                              |
| Openers, female: 2 plants.....             | 1910  | 13                   | 45.5                              | 77                                                         | 23                    | .....            | ..... | .....    | .244                            | .....                                               | 69                   | 31                   | .....                | .....             | 11.08                              |
|                                            | 1911  | 17                   | 44.1                              | 88                                                         | 12                    | .....            | ..... | .....    | .231                            | 100                                                 | .....                | .....                | .....                | .....             | 10.22                              |
| 1 plant.....                               | 1911  | 15                   | 42.7                              | 100                                                        | .....                 | .....            | ..... | .....    | .230                            | 100                                                 | .....                | .....                | .....                | .....             | 9.81                               |
|                                            | 1912  | 18                   | 42.7                              | 100                                                        | .....                 | .....            | ..... | .....    | .209                            | 39                                                  | 33                   | 28                   | .....                | .....             | 8.93                               |
|                                            | 1913  | 11                   | 60.0                              | .....                                                      | .....                 | 100              | ..... | .....    | .198                            | 46                                                  | 55                   | .....                | .....                | .....             | 11.89                              |
| Risers: 2 plants.....                      | 1910  | 34                   | 44.1                              | 88                                                         | 12                    | .....            | ..... | .....    | .262                            | .....                                               | 50                   | 29                   | 21                   | .....             | 11.51                              |
|                                            | 1911  | 39                   | 45.0                              | 85                                                         | 5                     | 10               | ..... | .....    | .279                            | .....                                               | 46                   | 15                   | 39                   | .....             | 12.51                              |
| 3 plants.....                              | 1911  | 42                   | 44.8                              | 86                                                         | 5                     | 10               | ..... | .....    | .275                            | .....                                               | 50                   | 14                   | 36                   | .....             | 12.30                              |
|                                            | 1912  | 30                   | 50.1                              | 40                                                         | 60                    | .....            | ..... | .....    | .239                            | 13                                                  | 53                   | 23                   | 10                   | .....             | 11.98                              |
|                                            | 1913  | 34                   | 45.1                              | 100                                                        | .....                 | .....            | ..... | .....    | .279                            | .....                                               | 24                   | 59                   | 18                   | .....             | 12.59                              |
| 4 plants.....                              | 1913  | 28                   | 44.8                              | 100                                                        | .....                 | .....            | ..... | .....    | .283                            | .....                                               | 18                   | 64                   | 18                   | .....             | 12.69                              |
|                                            | 1914  | 48                   | 51.3                              | 52                                                         | .....                 | 46               | 2     | .....    | .268                            | .....                                               | 31                   | 52                   | 15                   | 2                 | 13.70                              |
|                                            | 1915  | 41                   | 49.5                              | 66                                                         | .....                 | 32               | 2     | .....    | .288                            | 2                                                   | 22                   | 12                   | 63                   | .....             | 14.16                              |
| Screw boys: 5 plants.....                  | 1910  | 174                  | 42.7                              | 100                                                        | .....                 | .....            | ..... | .....    | .308                            | 2                                                   | 15                   | 17                   | 67                   | .....             | 13.15                              |
|                                            | 1911  | 186                  | 42.7                              | 100                                                        | .....                 | .....            | ..... | .....    | .342                            | .....                                               | 3                    | 19                   | 77                   | 1                 | 14.61                              |
| 6 plants.....                              | 1911  | 198                  | 42.7                              | 100                                                        | .....                 | .....            | ..... | .....    | .345                            | .....                                               | 3                    | 18                   | 79                   | 1                 | 14.72                              |
|                                            | 1912  | 221                  | 42.7                              | 100                                                        | .....                 | .....            | ..... | .....    | .352                            | .....                                               | 1                    | 19                   | 39                   | 42                | 15.03                              |
|                                            | 1913  | 218                  | 42.7                              | 100                                                        | .....                 | .....            | ..... | .....    | .373                            | .....                                               | 1                    | 17                   | 37                   | 46                | 15.91                              |
| 10 plants.....                             | 1913  | 387                  | 42.7                              | 100                                                        | .....                 | .....            | ..... | .....    | .366                            | .....                                               | 1                    | 13                   | 58                   | 29                | 15.64                              |
|                                            | 1914  | 372                  | 42.7                              | 100                                                        | .....                 | .....            | ..... | .....    | .384                            | .....                                               | (1)                  | 1                    | 66                   | 33                | 16.37                              |
| 11 plants.....                             | 1914  | 384                  | 42.7                              | 100                                                        | .....                 | .....            | ..... | .....    | .385                            | .....                                               | (2)                  | 1                    | 64                   | 34                | 16.43                              |
|                                            | 1915  | 372                  | 42.7                              | 100                                                        | .....                 | .....            | ..... | .....    | .389                            | .....                                               | .....                | 3                    | 58                   | 40                | 16.59                              |
| Unclassified—productive: 9 plants.....     | 1914  | 1,271                | 57.3                              | 24                                                         | 5                     | 21               | 22    | 28       | .247                            | 40                                                  | 26                   | 14                   | 15                   | 5                 | 13.85                              |
|                                            | 1915  | 1,279                | 58.5                              | 19                                                         | 9                     | 17               | 25    | 30       | .253                            | 37                                                  | 23                   | 13                   | 18                   | 10                | 14.50                              |
| Unclassified—non-productive: 9 plants..... | 1914  | 450                  | 64.6                              | (1)                                                        | 1                     | 24               | 34    | 41       | .222                            | 44                                                  | 36                   | 8                    | 10                   | 2                 | 14.52                              |
|                                            | 1915  | 400                  | 65.4                              | 1                                                          | 2                     | 22               | 28    | 48       | .224                            | 45                                                  | 32                   | 11                   | 10                   | 3                 | 14.53                              |
|                                            |       |                      |                                   |                                                            |                       |                  |       |          |                                 | Under 30 cts.                                       | 30 and under 40 cts. | 40 and under 50 cts. | 50 and under 60 cts. | 60 cts. and over. |                                    |
| Catchers: 5 plants.....                    | 1910  | 174                  | 42.7                              | 100                                                        | .....                 | .....            | ..... | .....    | .427                            | 20                                                  | 22                   | 5                    | 53                   | .....             | 18.23                              |
|                                            | 1911  | 186                  | 42.7                              | 100                                                        | .....                 | .....            | ..... | .....    | .481                            | 3                                                   | 32                   | 11                   | 54                   | .....             | 20.52                              |
| 6 plants.....                              | 1911  | 198                  | 42.7                              | 100                                                        | .....                 | .....            | ..... | .....    | .487                            | 3                                                   | 30                   | 11                   | 57                   | .....             | 20.79                              |
|                                            | 1912  | 239                  | 42.7                              | 100                                                        | .....                 | .....            | ..... | .....    | .403                            | 6                                                   | 33                   | 54                   | 5                    | 2                 | 17.20                              |
|                                            | 1913  | 238                  | 42.7                              | 100                                                        | .....                 | .....            | ..... | .....    | .427                            | 2                                                   | 32                   | 55                   | 7                    | 4                 | 18.23                              |
| 10 plants.....                             | 1913  | 354                  | 42.7                              | 100                                                        | .....                 | .....            | ..... | .....    | .463                            | 1                                                   | 22                   | 45                   | 26                   | 6                 | 19.74                              |
|                                            | 1914  | 335                  | 42.7                              | 100                                                        | .....                 | .....            | ..... | .....    | .462                            | 2                                                   | 27                   | 41                   | 18                   | 12                | 19.73                              |
| 11 plants.....                             | 1914  | 347                  | 42.7                              | 100                                                        | .....                 | .....            | ..... | .....    | .468                            | 2                                                   | 26                   | 40                   | 18                   | 14                | 19.95                              |
|                                            | 1915  | 361                  | 42.7                              | 100                                                        | .....                 | .....            | ..... | .....    | .489                            | .....                                               | 13                   | 45                   | 32                   | 10                | 20.87                              |

<sup>1</sup> Less than one-half of 1 per cent.

TABLE 42.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, BY OCCUPATIONS, 1910 TO 1915—*TIN-PLATE MILLS*—Continued.

| Occupation, and number of plants.         | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |                 |     |         | Average rate of wages per hour. | Percent of employees whose earnings per hour were— |                      |                      |                      |                   | Average full-time weekly earnings. |
|-------------------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|----------------------|-----------------|-----|---------|---------------------------------|----------------------------------------------------|----------------------|----------------------|----------------------|-------------------|------------------------------------|
|                                           |       |                      |                                   | 48 and under.                                              | Over 48 and under 56 | 56 and under 60 | 60  | Over 60 |                                 | Under 30 cts.                                      | 30 and under 40 cts. | 40 and under 50 cts. | 50 and under 60 cts. | 60 cts. and over. |                                    |
| Heaters' helpers:<br>4 plants.....        | 1910  | 165                  | 42.7                              | 100                                                        |                      |                 |     |         | \$0.348                         | 100                                                |                      |                      |                      |                   | \$14.84                            |
|                                           | 1911  | 154                  | 42.7                              | 100                                                        |                      |                 |     |         | .438                            | 60                                                 | 1                    | 39                   |                      |                   | 18.71                              |
|                                           | 1911  | 166                  | 42.7                              | 100                                                        |                      |                 |     |         | .436                            | 55                                                 | 8                    | 36                   |                      |                   | 18.60                              |
|                                           | 1912  | 109                  | 42.7                              | 100                                                        |                      |                 |     |         | .396                            | 75                                                 | 10                   | 15                   |                      |                   | 16.92                              |
|                                           | 1913  | 103                  | 42.7                              | 100                                                        |                      |                 |     |         | .425                            | 57                                                 | 19                   | 23                   |                      |                   | 18.15                              |
|                                           | 1913  | 147                  | 42.7                              | 100                                                        |                      |                 |     |         | .430                            | 1                                                  | 47                   | 33                   | 15                   | 4                 | 18.36                              |
|                                           | 1914  | 127                  | 42.7                              | 100                                                        |                      |                 |     |         | .476                            | 15                                                 | 54                   | 22                   | 9                    |                   | 20.32                              |
|                                           | 1914  | 121                  | 42.7                              | 100                                                        |                      |                 |     |         | .459                            | 19                                                 | 63                   | 9                    |                      |                   | 19.57                              |
|                                           | 1915  | 202                  | 42.7                              | 100                                                        |                      |                 |     |         | .455                            | 17                                                 | 65                   | 14                   | 3                    |                   | 19.43                              |
|                                           | 1910  | 174                  | 42.7                              | 100                                                        |                      |                 |     |         | .425                            | 35                                                 | 57                   | 9                    |                      |                   | 18.14                              |
| Roughers:<br>5 plants.....                | 1911  | 184                  | 42.7                              | 100                                                        |                      |                 |     |         | .506                            | 43                                                 | 57                   |                      |                      |                   | 21.60                              |
|                                           | 1911  | 196                  | 42.7                              | 100                                                        |                      |                 |     |         | .507                            | 41                                                 | 59                   |                      |                      |                   | 21.63                              |
|                                           | 1912  | 216                  | 42.7                              | 100                                                        |                      |                 |     |         | .513                            | 1                                                  | 38                   | 59                   | 2                    |                   | 21.89                              |
|                                           | 1913  | 214                  | 42.7                              | 100                                                        |                      |                 |     |         | .553                            |                                                    | 35                   | 20                   | 45                   |                   | 23.59                              |
|                                           | 1913  | 380                  | 42.7                              | 100                                                        |                      |                 |     |         | .533                            | 1                                                  | 41                   | 33                   | 25                   |                   | 22.73                              |
|                                           | 1914  | 356                  | 42.7                              | 100                                                        |                      |                 |     |         | .557                            | (1)                                                | 22                   | 48                   | 29                   |                   | 23.78                              |
|                                           | 1914  | 367                  | 42.7                              | 100                                                        |                      |                 |     |         | .560                            | (1)                                                | 22                   | 47                   | 31                   |                   | 23.87                              |
|                                           | 1915  | 366                  | 42.7                              | 100                                                        |                      |                 |     |         | .562                            | (1)                                                | 19                   | 51                   | 29                   |                   | 23.96                              |
|                                           | 1910  | 224                  | 42.9                              | 98                                                         | 2                    |                 |     |         | .402                            | 16                                                 | 38                   | 43                   | 1                    | 1                 | 17.27                              |
|                                           | 1911  | 262                  | 43.0                              | 98                                                         | 1                    | 2               |     |         | .439                            | 1                                                  | 26                   | 69                   | 3                    | 2                 | 18.92                              |
| 5 plants.....                             | 1911  | 283                  | 43.0                              | 98                                                         | 1                    | 1               |     |         | .429                            | 1                                                  | 32                   | 64                   | 3                    | 1                 | 18.48                              |
|                                           | 1912  | 294                  | 43.4                              | 94                                                         | 6                    |                 |     |         | .444                            | 2                                                  | 39                   | 24                   | 33                   | 2                 | 19.28                              |
|                                           | 1913  | 296                  | 42.9                              | 100                                                        |                      |                 |     |         | .456                            | (1)                                                | 10                   | 84                   | 5                    | 1                 | 19.57                              |
|                                           | 1913  | 484                  | 43.6                              | 95                                                         |                      | 5               | (1) |         | .433                            | 1                                                  | 37                   | 56                   | 4                    | 1                 | 18.84                              |
|                                           | 1914  | 486                  | 43.5                              | 95                                                         |                      | 5               | (1) |         | .442                            |                                                    | 13                   | 76                   | 9                    | 2                 | 19.22                              |
|                                           | 1915  | 487                  | 43.3                              | 97                                                         |                      | 3               | (1) |         | .442                            |                                                    | 6                    | 76                   | 17                   | 1                 | 19.13                              |
|                                           |       |                      |                                   |                                                            |                      |                 |     |         |                                 |                                                    |                      |                      |                      |                   |                                    |
|                                           |       |                      |                                   |                                                            |                      |                 |     |         |                                 |                                                    |                      |                      |                      |                   |                                    |
|                                           |       |                      |                                   |                                                            |                      |                 |     |         |                                 |                                                    |                      |                      |                      |                   |                                    |
|                                           |       |                      |                                   |                                                            |                      |                 |     |         |                                 |                                                    |                      |                      |                      |                   |                                    |
|                                           |       |                      |                                   |                                                            |                      |                 |     |         |                                 |                                                    |                      |                      |                      |                   |                                    |
| Doubblers:<br>5 plants.....               | 1910  | 174                  | 42.7                              | 100                                                        |                      |                 |     |         | .632                            | 6                                                  | 14                   | 17                   | 13                   | 51                | 26.97                              |
|                                           | 1911  | 193                  | 42.7                              | 100                                                        |                      |                 |     |         | .698                            |                                                    | 3                    | 14                   | 42                   | 43                | 29.80                              |
|                                           | 1911  | 205                  | 42.7                              | 100                                                        |                      |                 |     |         | .706                            |                                                    | 2                    | 13                   | 39                   | 46                | 30.13                              |
|                                           | 1912  | 247                  | 42.7                              | 100                                                        |                      |                 |     |         | .677                            |                                                    | 6                    | 27                   | 11                   | 56                | 28.99                              |
|                                           | 1913  | 251                  | 42.7                              | 100                                                        |                      |                 |     |         | .699                            |                                                    | 4                    | 10                   | 26                   | 61                | 29.81                              |
|                                           | 1913  | 341                  | 42.7                              | 100                                                        |                      |                 |     |         | .740                            |                                                    | 1                    | 13                   | 28                   | 57                | 31.53                              |
|                                           | 1914  | 324                  | 42.7                              | 100                                                        |                      |                 |     |         | .734                            |                                                    | 1                    | 9                    | 33                   | 57                | 31.32                              |
|                                           | 1914  | 316                  | 42.7                              | 100                                                        |                      |                 |     |         | .734                            |                                                    | 1                    | 9                    | 34                   | 56                | 31.33                              |
|                                           | 1915  | 322                  | 42.7                              | 100                                                        |                      |                 |     |         | .718                            |                                                    | (1)                  | 8                    | 35                   | 56                | 30.63                              |
|                                           |       |                      |                                   |                                                            |                      |                 |     |         |                                 |                                                    |                      |                      |                      |                   |                                    |
| Doubblers, level-handed:<br>4 plants..... | 1913  | 46                   | 42.7                              | 100                                                        |                      |                 |     |         | .567                            |                                                    | 17                   | 52                   | 22                   | 9                 | 24.20                              |
|                                           | 1914  | 48                   | 42.7                              | 100                                                        |                      |                 |     |         | .564                            |                                                    | 13                   | 58                   | 25                   | 4                 | 24.06                              |
|                                           | 1914  | 54                   | 42.7                              | 100                                                        |                      |                 |     |         | .559                            |                                                    | 15                   | 59                   | 22                   | 4                 | 23.84                              |
|                                           | 1915  | 62                   | 42.7                              | 100                                                        |                      |                 |     |         | .561                            |                                                    | 29                   | 42                   | 19                   | 10                | 23.92                              |
|                                           |       |                      |                                   |                                                            |                      |                 |     |         |                                 |                                                    |                      |                      |                      |                   |                                    |
|                                           |       |                      |                                   |                                                            |                      |                 |     |         |                                 |                                                    |                      |                      |                      |                   |                                    |
|                                           |       |                      |                                   |                                                            |                      |                 |     |         |                                 |                                                    |                      |                      |                      |                   |                                    |
|                                           |       |                      |                                   |                                                            |                      |                 |     |         |                                 |                                                    |                      |                      |                      |                   |                                    |
|                                           |       |                      |                                   |                                                            |                      |                 |     |         |                                 |                                                    |                      |                      |                      |                   |                                    |
|                                           |       |                      |                                   |                                                            |                      |                 |     |         |                                 |                                                    |                      |                      |                      |                   |                                    |
|                                           |       |                      |                                   |                                                            |                      |                 |     |         |                                 |                                                    |                      |                      |                      |                   |                                    |

1 Less than one-half of 1 per cent.

TABLE 42.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, BY OCCUPATIONS, 1910 TO 1915—*TIN-PLATE MILLS*—Concluded.

| Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Per cent of employees whose full-time hours per week were— |                      |                 |    |         | Average rate of wages per hour. | Per cent of employees whose earnings per hour were— |                      |                      |                      |                   | Average full-time weekly earnings. |
|-----------------------------------|-------|----------------------|-----------------------------------|------------------------------------------------------------|----------------------|-----------------|----|---------|---------------------------------|-----------------------------------------------------|----------------------|----------------------|----------------------|-------------------|------------------------------------|
|                                   |       |                      |                                   | 48 and under.                                              | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 |                                 | Under 40 cts.                                       | 40 and under 50 cts. | 50 and under 60 cts. | 60 and under 70 cts. | 70 cts. and over. |                                    |
| <b>Heaters:</b>                   |       |                      |                                   |                                                            |                      |                 |    |         |                                 |                                                     |                      |                      |                      |                   |                                    |
| 5 plants.....                     | 1910  | 174                  | 42.7                              | 100                                                        |                      |                 |    |         | \$0.648                         | 7                                                   | 13                   | 19                   | 8                    | 53                | \$27.63                            |
|                                   | 1911  | 203                  | 42.7                              | 100                                                        |                      |                 |    |         | .709                            |                                                     |                      | 11                   | 61                   | 29                | 30.24                              |
| 6 plants.....                     | 1911  | 215                  | 42.7                              | 100                                                        |                      |                 |    |         | .714                            |                                                     |                      | 10                   | 57                   | 33                | 30.47                              |
|                                   | 1912  | 314                  | 42.7                              | 100                                                        |                      |                 |    |         | .675                            |                                                     |                      | 24                   | 58                   | 19                | 28.78                              |
|                                   | 1913  | 312                  | 42.7                              | 100                                                        |                      |                 |    |         | .679                            |                                                     |                      | 9                    | 62                   | 29                | 28.99                              |
| 9 plants.....                     | 1913  | 156                  | 42.7                              | 100                                                        |                      |                 |    |         | .750                            |                                                     |                      | 6                    | 32                   | 62                | 31.99                              |
|                                   | 1914  | 142                  | 42.7                              | 100                                                        |                      |                 |    |         | .752                            |                                                     |                      | 8                    | 22                   | 70                | 32.10                              |
| 9 plants.....                     | 1914  | 136                  | 42.7                              | 100                                                        |                      |                 |    |         | .749                            |                                                     |                      | 8                    | 23                   | 69                | 31.94                              |
|                                   | 1915  | 211                  | 42.7                              | 100                                                        |                      |                 |    |         | .725                            |                                                     |                      | 12                   | 32                   | 56                | 30.95                              |
| <b>Heaters, level-handed:</b>     |       |                      |                                   |                                                            |                      |                 |    |         |                                 |                                                     |                      |                      |                      |                   |                                    |
| 6 plants.....                     | 1913  | 414                  | 42.7                              | 100                                                        |                      |                 |    |         | .595                            | (1)                                                 | 11                   | 42                   | 36                   | 11                | 25.38                              |
|                                   | 1914  | 430                  | 42.7                              | 100                                                        |                      |                 |    |         | .622                            | (1)                                                 | 3                    | 36                   | 48                   | 13                | 26.53                              |
| 6 plants.....                     | 1914  | 332                  | 42.7                              | 100                                                        |                      |                 |    |         | .616                            | 1                                                   | 4                    | 40                   | 42                   | 13                | 26.29                              |
|                                   | 1915  | 294                  | 42.7                              | 100                                                        |                      |                 |    |         | .611                            |                                                     | 4                    | 45                   | 39                   | 12                | 26.08                              |
| <b>Redippers:</b>                 |       |                      |                                   |                                                            |                      |                 |    |         |                                 |                                                     |                      |                      |                      |                   |                                    |
| 1 plant.....                      | 1910  | 14                   | 46.2                              | 71                                                         | 29                   |                 |    |         | .570                            |                                                     | 14                   | 50                   | 36                   |                   | 26.56                              |
|                                   | 1911  | 17                   | 47.2                              | 71                                                         | 6                    | 24              |    |         | .619                            |                                                     | 6                    | 35                   | 53                   | 6                 | 29.32                              |
|                                   | 1912  | 10                   | 55.0                              |                                                            | 100                  |                 |    |         | .592                            |                                                     | 10                   | 30                   | 60                   |                   | 32.58                              |
|                                   | 1913  | 13                   | 46.6                              | 100                                                        |                      |                 |    |         | .622                            | 8                                                   | 8                    | 15                   | 46                   | 23                | 29.00                              |
| 3 plants.....                     | 1913  | 26                   | 53.0                              | 42                                                         |                      | 54              | 4  |         | .536                            |                                                     | 35                   | 31                   | 23                   | 12                | 28.03                              |
|                                   | 1914  | 23                   | 53.0                              | 43                                                         |                      | 52              | 4  |         | .538                            | 4                                                   | 43                   | 35                   | 13                   | 4                 | 28.55                              |
|                                   | 1915  | 19                   | 51.4                              | 58                                                         |                      | 37              | 5  |         | .563                            | 5                                                   | 11                   | 47                   | 37                   |                   | 28.81                              |
| <b>Rollers:</b>                   |       |                      |                                   |                                                            |                      |                 |    |         |                                 |                                                     |                      |                      |                      |                   |                                    |
| 5 plants.....                     | 1910  | 174                  | 42.7                              | 100                                                        |                      |                 |    |         | 1.025                           |                                                     | 1                    | 1                    | 3                    | 96                | 43.73                              |
|                                   | 1911  | 189                  | 42.7                              | 100                                                        |                      |                 |    |         | 1.103                           |                                                     |                      |                      | 1                    | 99                | 47.05                              |
| 6 plants.....                     | 1911  | 201                  | 42.7                              | 100                                                        |                      |                 |    |         | 1.109                           |                                                     |                      |                      | (1)                  | 100               | 47.33                              |
|                                   | 1912  | 229                  | 42.7                              | 100                                                        |                      |                 |    |         | 1.097                           |                                                     |                      |                      |                      | 100               | 46.82                              |
|                                   | 1913  | 231                  | 42.7                              | 100                                                        |                      |                 |    |         | 1.119                           |                                                     |                      |                      |                      | 100               | 47.76                              |
| 9 plants.....                     | 1913  | 356                  | 42.7                              | 100                                                        |                      |                 |    |         | 1.139                           |                                                     |                      |                      | (1)                  | 100               | 48.59                              |
|                                   | 1914  | 334                  | 42.7                              | 100                                                        |                      |                 |    |         | 1.111                           |                                                     |                      |                      | (1)                  | 100               | 47.39                              |
| 10 plants.....                    | 1914  | 345                  | 42.7                              | 100                                                        |                      |                 |    |         | 1.115                           |                                                     |                      |                      | (1)                  | 100               | 47.59                              |
|                                   | 1915  | 349                  | 42.7                              | 100                                                        |                      |                 |    |         | 1.106                           |                                                     |                      |                      | 1                    | 99                | 47.17                              |
| <b>Shearmen:</b>                  |       |                      |                                   |                                                            |                      |                 |    |         |                                 |                                                     |                      |                      |                      |                   |                                    |
| 5 plants.....                     | 1910  | 58                   | 52.7                              | 53                                                         | 12                   |                 | 35 |         | .497                            | 24                                                  | 21                   | 55                   |                      |                   | 25.68                              |
|                                   | 1911  | 61                   | 53.1                              | 51                                                         | 12                   |                 | 38 |         | .548                            | 7                                                   | 41                   | 3                    | 49                   |                   | 28.50                              |
| 6 plants.....                     | 1911  | 65                   | 52.8                              | 54                                                         | 11                   |                 | 35 |         | .555                            | 6                                                   | 39                   | 3                    | 52                   |                   | 28.72                              |
|                                   | 1912  | 72                   | 51.8                              | 60                                                         | 10                   |                 | 31 |         | .573                            | 17                                                  | 25                   | 15                   | 4                    | 39                | 29.00                              |
|                                   | 1913  | 73                   | 51.9                              | 59                                                         | 10                   |                 | 32 |         | .606                            | 11                                                  | 29                   | 3                    | 16                   | 41                | 30.66                              |
| 9 plants.....                     | 1913  | 126                  | 56.5                              | 6                                                          | 28                   | 54              | 13 |         | .485                            | 23                                                  | 33                   | 30                   | 12                   | 2                 | 27.34                              |
|                                   | 1914  | 116                  | 56.9                              | 3                                                          | 30                   | 53              | 14 |         | .486                            | 15                                                  | 43                   | 36                   | 3                    | 3                 | 27.61                              |
| 8 plants.....                     | 1914  | 113                  | 57.3                              |                                                            | 31                   | 55              | 14 |         | .479                            | 15                                                  | 44                   | 37                   | 3                    | 1                 | 27.52                              |
|                                   | 1915  | 112                  | 57.3                              |                                                            | 30                   | 55              | 14 |         | .514                            | 11                                                  | 38                   | 34                   | 18                   |                   | 29.55                              |

(1) Less than one-half of 1 per cent.

Referring to the first occupation in Table 42, page 436—assorters, female—comparison can be made of data for four identical plants in 1910 and 1911, for five plants in 1911, 1912, and 1913, and for six plants in 1913, 1914, and 1915. The first line of the table is read as follows: In 1910 four tin-plate mills from which reports were

obtained employed 101 female sorters, whose average full-time hours of work were 49.7 per week. Of these 101 sorters, 46 per cent worked 48 hours and under per week, 8 per cent worked over 48 and under 56, and 47 per cent worked 56 and under 60 hours per week. The average rate of wages or earnings per hour in 1910 was 12.8 cents, 92 per cent having earned under 14 cents per hour, and the remaining 8 per cent 14 and under 16 cents per hour. The average full-time weekly earnings were \$6.41. The other lines of the table may be read in the same manner.

The average full-time weekly earnings of tin-plate mill employees in 1915 ranged from \$8.51 for shearmen's helpers to \$47.17 for rollers.

#### INDEX NUMBERS.

Owing to changes in the number of plants reported from year to year, and the consequent differences in the averages for the overlapping year in two groups of plants, it is difficult to make a comparison of the actual data over a period of several years which will give an accurate measure of the changes throughout the period. To aid in making such a comparison, relative or index numbers have been computed from the averages shown in Table 42 for full-time hours per week, rates of wages per hour, and full-time weekly earnings for each occupation from 1910 to 1915, inclusive. Such figures appear in Table 43.

These relative or index numbers are simply percentages for which the data for 1915 are taken as the base, or 100 per cent. The relative for each year is the per cent which the average for that year is of the average for 1915. For example, the relative full-time weekly earnings of rollers in 1910 were 95 as compared with 100 in 1915; that is, the full-time weekly earnings of rollers in 1910 were 95 per cent of the full-time weekly earnings in this occupation in 1915. The method of computing the relative numbers is explained on pages 65 to 67.

Table 43 also shows for each occupation the per cent of increase or decrease in full-time hours per week, rates of wages per hour, and full-time weekly earnings in 1915 as compared with each specified year preceding. Thus the full-time weekly earnings of rollers in 1915 were 5 per cent higher than in 1910, 3 per cent lower than in 1911 and 1913, and 1 per cent lower than in 1912 and 1914.

In other columns of the table is shown the per cent of change in each year as compared with the year immediately preceding. Thus the full-time weekly earnings of rollers in 1911 were 8 per cent higher than in 1910; in 1912 1 per cent lower than in 1911; in 1913 2 per cent higher than in 1912; in 1914 2 per cent lower than in 1913; and in 1915 1 percent lower than in 1914. The other occupations and items of the table can be studied in like manner. The percentages of increase and decrease are computed from the relative numbers.

TABLE 43.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATIONS—*TIN-PLATE MILLS.*

| Occupation and year.            | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|---------------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                                 | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in— |                                                      |
|                                 |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| <b>Rollers:</b>                 |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                       | 100                                | (1)                                          | (1)                                                  | 95                               | + 5                                          | .....                                                | 95                                  | + 5                                          | .....                                                |
| 1911.....                       | 100                                | (1)                                          | (1)                                                  | 102                              | — 2                                          | + 7                                                  | 103                                 | — 3                                          | + 8                                                  |
| 1912.....                       | 100                                | (1)                                          | (1)                                                  | 101                              | — 1                                          | .....                                                | 101                                 | — 1                                          | — 1                                                  |
| 1913.....                       | 100                                | (1)                                          | (1)                                                  | 103                              | — 3                                          | + 2                                                  | 103                                 | — 3                                          | + 2                                                  |
| 1914.....                       | 100                                | (1)                                          | (1)                                                  | 101                              | — 1                                          | — 2                                                  | 101                                 | — 1                                          | — 2                                                  |
| 1915.....                       | 100                                | (1)                                          | (1)                                                  | 100                              | .....                                        | — 1                                                  | 100                                 | .....                                        | — 1                                                  |
| <b>Roughers:</b>                |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                       | 103                                | (1)                                          | (1)                                                  | 73                               | +37                                          | .....                                                | 73                                  | +37                                          | .....                                                |
| 1911.....                       | 100                                | (1)                                          | (1)                                                  | 87                               | +15                                          | +10                                                  | 87                                  | +15                                          | +10                                                  |
| 1912.....                       | 100                                | (1)                                          | (1)                                                  | 88                               | +11                                          | + 1                                                  | 88                                  | +14                                          | + 1                                                  |
| 1913.....                       | 100                                | (1)                                          | (1)                                                  | 95                               | + 5                                          | + 8                                                  | 95                                  | + 5                                          | + 8                                                  |
| 1914.....                       | 103                                | (1)                                          | (1)                                                  | 100                              | (1)                                          | + 5                                                  | 100                                 | (1)                                          | + 5                                                  |
| 1915.....                       | 100                                | .....                                        | (1)                                                  | 100                              | .....                                        | (1)                                                  | 100                                 | .....                                        | (1)                                                  |
| <b>Catchers:</b>                |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                       | 100                                | (1)                                          | (1)                                                  | 97                               | + 3                                          | .....                                                | 97                                  | + 3                                          | .....                                                |
| 1911.....                       | 100                                | (1)                                          | (1)                                                  | 103                              | — 8                                          | +12                                                  | 103                                 | — 8                                          | +12                                                  |
| 1912.....                       | 100                                | (1)                                          | (1)                                                  | 91                               | +10                                          | —17                                                  | 93                                  | +11                                          | —17                                                  |
| 1913.....                       | 100                                | (1)                                          | (1)                                                  | 93                               | + 4                                          | + 5                                                  | 93                                  | + 4                                          | + 7                                                  |
| 1914.....                       | 100                                | (1)                                          | (1)                                                  | 93                               | + 4                                          | (1)                                                  | 96                                  | + 4                                          | (1)                                                  |
| 1915.....                       | 103                                | .....                                        | (1)                                                  | 103                              | .....                                        | + 4                                                  | 100                                 | .....                                        | + 4                                                  |
| <b>Screwbores:</b>              |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                       | 100                                | (1)                                          | (1)                                                  | 73                               | +27                                          | .....                                                | 73                                  | +27                                          | .....                                                |
| 1911.....                       | 100                                | (1)                                          | (1)                                                  | 87                               | +15                                          | +10                                                  | 87                                  | +15                                          | +10                                                  |
| 1912.....                       | 100                                | (1)                                          | (1)                                                  | 87                               | +12                                          | + 2                                                  | 83                                  | +12                                          | + 2                                                  |
| 1913.....                       | 100                                | (1)                                          | (1)                                                  | 91                               | + 6                                          | + 6                                                  | 95                                  | + 5                                          | + 7                                                  |
| 1914.....                       | 100                                | (1)                                          | (1)                                                  | 93                               | + 1                                          | + 5                                                  | 97                                  | + 1                                          | + 4                                                  |
| 1915.....                       | 100                                | .....                                        | (1)                                                  | 100                              | .....                                        | + 1                                                  | 100                                 | .....                                        | + 1                                                  |
| <b>Doubleers:</b>               |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                       | 100                                | (1)                                          | (1)                                                  | 81                               | + 6                                          | .....                                                | 84                                  | + 6                                          | .....                                                |
| 1911.....                       | 100                                | (1)                                          | (1)                                                  | 104                              | — 4                                          | +11                                                  | 104                                 | — 4                                          | +11                                                  |
| 1912.....                       | 100                                | (1)                                          | (1)                                                  | 103                              | (1)                                          | — 4                                                  | 100                                 | (1)                                          | — 4                                                  |
| 1913.....                       | 100                                | (1)                                          | (1)                                                  | 103                              | — 3                                          | + 3                                                  | 103                                 | — 3                                          | + 3                                                  |
| 1914.....                       | 100                                | (1)                                          | (1)                                                  | 102                              | — 2                                          | — 1                                                  | 102                                 | — 2                                          | — 1                                                  |
| 1915.....                       | 100                                | .....                                        | (1)                                                  | 100                              | .....                                        | — 2                                                  | 100                                 | .....                                        | — 2                                                  |
| <b>Doubleers, level-handed:</b> |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                       | 100                                | (1)                                          | (1)                                                  | 100                              | (1)                                          | .....                                                | 100                                 | (1)                                          | .....                                                |
| 1911.....                       | 100                                | (1)                                          | (1)                                                  | 103                              | (1)                                          | (1)                                                  | 100                                 | (1)                                          | (1)                                                  |
| 1912.....                       | 100                                | .....                                        | (1)                                                  | 100                              | .....                                        | (1)                                                  | 100                                 | .....                                        | (1)                                                  |
| <b>Doubleers' helpers:</b>      |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                       | 100                                | (1)                                          | (1)                                                  | 73                               | +39                                          | .....                                                | 73                                  | +39                                          | .....                                                |
| 1911.....                       | 100                                | (1)                                          | (1)                                                  | 79                               | +27                                          | +19                                                  | 73                                  | +27                                          | +10                                                  |
| 1912.....                       | 100                                | (1)                                          | (1)                                                  | 83                               | +23                                          | + 5                                                  | 83                                  | +20                                          | + 5                                                  |
| 1913.....                       | 100                                | (1)                                          | (1)                                                  | 83                               | +14                                          | + 6                                                  | 88                                  | +14                                          | + 6                                                  |
| 1914.....                       | 100                                | (1)                                          | (1)                                                  | 93                               | + 5                                          | + 8                                                  | 91                                  | + 6                                          | + 7                                                  |
| 1915.....                       | 100                                | .....                                        | (1)                                                  | 100                              | .....                                        | + 5                                                  | 100                                 | .....                                        | + 6                                                  |
| <b>Heaters:</b>                 |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                       | 100                                | (1)                                          | (1)                                                  | 99                               | + 1                                          | .....                                                | 93                                  | + 1                                          | .....                                                |
| 1911.....                       | 100                                | (1)                                          | (1)                                                  | 108                              | — 7                                          | + 9                                                  | 108                                 | — 7                                          | + 9                                                  |
| 1912.....                       | 100                                | (1)                                          | (1)                                                  | 102                              | — 2                                          | — 6                                                  | 102                                 | — 2                                          | — 6                                                  |
| 1913.....                       | 100                                | (1)                                          | (1)                                                  | 103                              | — 3                                          | + 1                                                  | 103                                 | — 3                                          | + 1                                                  |
| 1914.....                       | 100                                | (1)                                          | (1)                                                  | 103                              | — 3                                          | (1)                                                  | 103                                 | — 3                                          | (1)                                                  |
| 1915.....                       | 100                                | .....                                        | (1)                                                  | 100                              | .....                                        | — 3                                                  | 100                                 | .....                                        | — 3                                                  |
| <b>Heaters, level-handed:</b>   |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                       | 100                                | (1)                                          | (1)                                                  | 97                               | + 3                                          | .....                                                | 97                                  | + 3                                          | .....                                                |
| 1911.....                       | 100                                | (1)                                          | (1)                                                  | 101                              | — 1                                          | + 4                                                  | 101                                 | — 1                                          | + 4                                                  |
| 1912.....                       | 100                                | (1)                                          | (1)                                                  | 100                              | .....                                        | — 1                                                  | 100                                 | .....                                        | — 1                                                  |

1 No change.

TABLE 43.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATIONS—*TIN-PLATE MILLS*—Continued.

| Occupation and year.       | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|----------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                            | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in— |                                                      |
|                            |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| <b>Heaters' helpers:</b>   |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                  | 100                                | (1)                                          | .....                                                | 74                               | +35                                          | .....                                                | 74                                  | +35                                          | .....                                                |
| 1911.....                  | 100                                | (1)                                          | (1)                                                  | 94                               | + 6                                          | +27                                                  | 93                                  | + 8                                          | +26                                                  |
| 1912.....                  | 100                                | (1)                                          | (1)                                                  | 85                               | +18                                          | -17                                                  | 85                                  | +18                                          | - 9                                                  |
| 1913.....                  | 100                                | (1)                                          | (1)                                                  | 91                               | +19                                          | + 7                                                  | 91                                  | +19                                          | + 7                                                  |
| 1914.....                  | 100                                | (1)                                          | (1)                                                  | 101                              | - 1                                          | +11                                                  | 101                                 | - 1                                          | +11                                                  |
| 1915.....                  | 100                                | .....                                        | (1)                                                  | 100                              | .....                                        | - 1                                                  | 100                                 | .....                                        | - 1                                                  |
| <b>Shearmen:</b>           |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                  | 100                                | (1)                                          | .....                                                | 77                               | +39                                          | .....                                                | 78                                  | +28                                          | .....                                                |
| 1911.....                  | 101                                | - 1                                          | + 1                                                  | 85                               | +18                                          | +10                                                  | 86                                  | +18                                          | +10                                                  |
| 1912.....                  | 97                                 | + 1                                          | - 2                                                  | 88                               | +14                                          | + 4                                                  | 87                                  | +15                                          | + 1                                                  |
| 1913.....                  | 99                                 | + 1                                          | (1)                                                  | 93                               | + 8                                          | + 6                                                  | 92                                  | + 9                                          | + 6                                                  |
| 1914.....                  | 100                                | (1)                                          | + 1                                                  | 93                               | + 8                                          | (1)                                                  | 93                                  | + 8                                          | .....                                                |
| 1915.....                  | 100                                | .....                                        | (1)                                                  | 100                              | .....                                        | + 8                                                  | 100                                 | .....                                        | + 8                                                  |
| <b>Shearmen's helpers:</b> |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                  | 105                                | - 5                                          | .....                                                | 78                               | +28                                          | .....                                                | 82                                  | +22                                          | .....                                                |
| 1911.....                  | 101                                | - 1                                          | - 4                                                  | 78                               | +28                                          | (1)                                                  | 79                                  | +27                                          | - 4                                                  |
| 1912.....                  | 99                                 | + 1                                          | - 2                                                  | 81                               | +23                                          | + 4                                                  | 81                                  | +23                                          | + 3                                                  |
| 1913.....                  | 101                                | - 1                                          | + 2                                                  | 98                               | + 2                                          | +21                                                  | 100                                 | (1)                                          | +23                                                  |
| 1914.....                  | 100                                | (1)                                          | - 1                                                  | 100                              | (1)                                          | + 2                                                  | 100                                 | (1)                                          | (1)                                                  |
| 1915.....                  | 100                                | .....                                        | (1)                                                  | 100                              | .....                                        | (1)                                                  | 100                                 | .....                                        | (1)                                                  |
| <b>Openers, male:</b>      |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                  | 98                                 | + 2                                          | .....                                                | 80                               | +25                                          | .....                                                | 78                                  | +28                                          | .....                                                |
| 1911.....                  | 87                                 | + 3                                          | - 1                                                  | 95                               | + 5                                          | +19                                                  | 92                                  | + 9                                          | +18                                                  |
| 1912.....                  | 98                                 | + 2                                          | + 1                                                  | 106                              | - 6                                          | +12                                                  | 104                                 | - 4                                          | +13                                                  |
| 1913.....                  | 99                                 | + 1                                          | + 1                                                  | 111                              | -19                                          | + 5                                                  | 110                                 | - 9                                          | + 6                                                  |
| 1914.....                  | 99                                 | + 1                                          | (1)                                                  | 103                              | - 7                                          | - 3                                                  | 107                                 | - 7                                          | - 3                                                  |
| 1915.....                  | 100                                | .....                                        | + 1                                                  | 100                              | .....                                        | - 7                                                  | 100                                 | .....                                        | - 7                                                  |
| <b>Openers, female:</b>    |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                  | 74                                 | +35                                          | .....                                                | 123                              | -19                                          | .....                                                | 67                                  | +49                                          | .....                                                |
| 1911.....                  | 71                                 | +41                                          | - 4                                                  | 118                              | -14                                          | - 6                                                  | 62                                  | +61                                          | - 7                                                  |
| 1912.....                  | 71                                 | +41                                          | (1)                                                  | 106                              | - 6                                          | - 9                                                  | 75                                  | +33                                          | +21                                                  |
| 1913.....                  | 100                                | .....                                        | +41                                                  | 100                              | .....                                        | - 6                                                  | 100                                 | .....                                        | +33                                                  |
| <b>Tinners:</b>            |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                  | 101                                | - 1                                          | .....                                                | 85                               | +18                                          | .....                                                | 85                                  | +18                                          | .....                                                |
| 1911.....                  | 101                                | - 1                                          | (1)                                                  | 92                               | + 9                                          | + 8                                                  | 93                                  | + 8                                          | + 9                                                  |
| 1912.....                  | 102                                | - 2                                          | + 1                                                  | 96                               | + 4                                          | + 4                                                  | 97                                  | + 3                                          | + 4                                                  |
| 1913.....                  | 101                                | - 1                                          | - 1                                                  | 98                               | + 2                                          | + 2                                                  | 99                                  | + 1                                          | + 2                                                  |
| 1914.....                  | 101                                | - 1                                          | (1)                                                  | 100                              | (1)                                          | + 2                                                  | 101                                 | - 1                                          | + 2                                                  |
| 1915.....                  | 100                                | .....                                        | - 1                                                  | 100                              | .....                                        | (1)                                                  | 100                                 | .....                                        | - 1                                                  |
| <b>Redippers:</b>          |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                  | 102                                | - 2                                          | .....                                                | 87                               | +15                                          | .....                                                | 89                                  | +12                                          | .....                                                |
| 1911.....                  | 104                                | - 4                                          | + 2                                                  | 95                               | + 5                                          | + 9                                                  | 98                                  | + 2                                          | +10                                                  |
| 1912.....                  | 122                                | -18                                          | +17                                                  | 91                               | +10                                          | - 4                                                  | 109                                 | - 8                                          | +11                                                  |
| 1913.....                  | 103                                | - 3                                          | -16                                                  | 95                               | + 5                                          | + 4                                                  | 97                                  | + 3                                          | -11                                                  |
| 1914.....                  | 101                                | - 3                                          | (1)                                                  | 96                               | + 4                                          | + 1                                                  | 99                                  | + 1                                          | + 2                                                  |
| 1915.....                  | 100                                | .....                                        | - 3                                                  | 100                              | .....                                        | + 4                                                  | 100                                 | .....                                        | + 1                                                  |
| <b>Risers:</b>             |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                  | 88                                 | +14                                          | .....                                                | 91                               | +19                                          | .....                                                | 81                                  | +23                                          | .....                                                |
| 1911.....                  | 90                                 | +11                                          | + 2                                                  | 97                               | + 3                                          | + 7                                                  | 88                                  | +14                                          | + 9                                                  |
| 1912.....                  | 100                                | (1)                                          | +11                                                  | 84                               | +19                                          | -13                                                  | 85                                  | +18                                          | - 3                                                  |
| 1913.....                  | 90                                 | +11                                          | -10                                                  | 98                               | + 2                                          | +17                                                  | 90                                  | +11                                          | + 6                                                  |
| 1914.....                  | 104                                | - 4                                          | +16                                                  | 93                               | + 8                                          | - 5                                                  | 97                                  | + 3                                          | + 8                                                  |
| 1915.....                  | 100                                | .....                                        | - 4                                                  | 100                              | .....                                        | + 8                                                  | 100                                 | .....                                        | + 3                                                  |

<sup>1</sup> No change.

TABLE 43.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1915, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, BY OCCUPATIONS—*TIN-PLATE MILLS*—Concluded.

| Occupation and year.               | Hours per week.                    |                                              |                                                      | Wages per hour.                  |                                              |                                                      | Weekly earnings.                    |                                              |                                                      |
|------------------------------------|------------------------------------|----------------------------------------------|------------------------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------------|
|                                    | Relative full-time hours per week. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative rate of wages per hour. | Per cent of increase (+) or decrease (—) in— |                                                      | Relative full-time weekly earnings. | Per cent of increase (+) or decrease (—) in— |                                                      |
|                                    |                                    | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                  | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |                                     | 1915 as compared with each specified year.   | Each specified year as compared with year preceding. |
| <b>Brannors:</b>                   |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                          | 98                                 | + 2                                          | —                                                    | 82                               | +22                                          | —                                                    | 80                                  | +25                                          | —                                                    |
| 1911.....                          | 97                                 | + 3                                          | — 1                                                  | 83                               | +22                                          | (1)                                                  | 80                                  | +25                                          | (1)                                                  |
| 1912.....                          | 97                                 | + 3                                          | (1)                                                  | 82                               | +22                                          | (1)                                                  | 80                                  | +25                                          | (1)                                                  |
| 1913.....                          | 97                                 | + 3                                          | (1)                                                  | 94                               | + 6                                          | +15                                                  | 92                                  | + 9                                          | +15                                                  |
| 1914.....                          | 98                                 | + 2                                          | + 1                                                  | 98                               | + 2                                          | + 4                                                  | 96                                  | + 4                                          | + 4                                                  |
| 1915.....                          | 100                                | —                                            | + 2                                                  | 100                              | —                                            | + 2                                                  | 100                                 | —                                            | + 4                                                  |
| <b>Assorters, male:</b>            |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1911.....                          | 100                                | (1)                                          | —                                                    | 96                               | + 4                                          | —                                                    | 95                                  | + 5                                          | —                                                    |
| 1912.....                          | 100                                | —                                            | (1)                                                  | 100                              | —                                            | + 4                                                  | 100                                 | —                                            | + 5                                                  |
| <b>Assorters, female:</b>          |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                          | 94                                 | + 6                                          | —                                                    | 79                               | +27                                          | —                                                    | 75                                  | +33                                          | —                                                    |
| 1911.....                          | 95                                 | + 5                                          | + 1                                                  | 85                               | +18                                          | + 8                                                  | 82                                  | +22                                          | + 9                                                  |
| 1912.....                          | 97                                 | + 3                                          | + 2                                                  | 89                               | +12                                          | + 5                                                  | 86                                  | +16                                          | + 5                                                  |
| 1913.....                          | 97                                 | + 3                                          | (1)                                                  | 101                              | — 1                                          | +13                                                  | 97                                  | + 3                                          | +13                                                  |
| 1914.....                          | 96                                 | + 4                                          | — 1                                                  | 94                               | + 6                                          | — 7                                                  | 92                                  | + 9                                          | — 5                                                  |
| 1915.....                          | 100                                | —                                            | + 4                                                  | 100                              | —                                            | + 6                                                  | 100                                 | —                                            | + 9                                                  |
| <b>Laborers:</b>                   |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                          | 101                                | — 1                                          | —                                                    | 86                               | +16                                          | —                                                    | 86                                  | +16                                          | —                                                    |
| 1911.....                          | 100                                | (1)                                          | — 1                                                  | 85                               | +18                                          | — 1                                                  | 85                                  | +18                                          | — 1                                                  |
| 1912.....                          | 101                                | — 1                                          | + 1                                                  | 88                               | +14                                          | + 4                                                  | 88                                  | +14                                          | + 4                                                  |
| 1913.....                          | 100                                | (1)                                          | — 1                                                  | 100                              | (1)                                          | +14                                                  | 99                                  | + 1                                          | +13                                                  |
| 1914.....                          | 101                                | — 1                                          | + 1                                                  | 100                              | (1)                                          | (1)                                                  | 101                                 | — 1                                          | + 2                                                  |
| 1915.....                          | 100                                | —                                            | — 1                                                  | 100                              | —                                            | (1)                                                  | 100                                 | —                                            | — 1                                                  |
| <b>Unclassified—productive:</b>    |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1914.....                          | 98                                 | + 2                                          | —                                                    | 98                               | + 2                                          | —                                                    | 96                                  | + 4                                          | —                                                    |
| 1915.....                          | 100                                | —                                            | + 2                                                  | 100                              | —                                            | + 2                                                  | 100                                 | —                                            | + 4                                                  |
| <b>Unclassified—nonproductive:</b> |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1914.....                          | 99                                 | + 1                                          | —                                                    | 99                               | + 1                                          | —                                                    | 100                                 | (1)                                          | —                                                    |
| 1915.....                          | 100                                | —                                            | + 1                                                  | 100                              | —                                            | + 1                                                  | 100                                 | —                                            | (1)                                                  |
| <b>All occupations:</b>            |                                    |                                              |                                                      |                                  |                                              |                                                      |                                     |                                              |                                                      |
| 1910.....                          | 100                                | (1)                                          | —                                                    | 82                               | +22                                          | —                                                    | 82                                  | +22                                          | —                                                    |
| 1911.....                          | 100                                | (1)                                          | (1)                                                  | 92                               | + 9                                          | +12                                                  | 92                                  | + 9                                          | +12                                                  |
| 1912.....                          | 100                                | (1)                                          | (1)                                                  | 93                               | + 8                                          | + 1                                                  | 93                                  | + 8                                          | + 1                                                  |
| 1913.....                          | 100                                | (1)                                          | (1)                                                  | 96                               | + 4                                          | + 3                                                  | 97                                  | + 3                                          | + 4                                                  |
| 1914.....                          | 100                                | (1)                                          | (1)                                                  | 98                               | + 2                                          | + 2                                                  | 99                                  | + 1                                          | + 2                                                  |
| 1915.....                          | 100                                | —                                            | (1)                                                  | 100                              | —                                            | + 2                                                  | 100                                 | —                                            | + 1                                                  |

1 No change.



The relative full-time weekly earnings for all occupations combined in 1910 was 82, as compared with 100 in 1915. The relative increased 12 per cent to 92 in 1911, to 93 in 1912, to 97 in 1913, to 99 in 1914, and in 1915, the base year, to 100. These relative numbers for each year previous to 1914 are based on a combination of the principal productive occupations only, while those for 1914 and 1915 include the unclassified groups (see pp. 55 and 56), tabulated for 1914 and 1915 for the first time.

**FULL-TIME WORKING DAYS PER WEEK.**

The number and per cent of employees in the principal productive occupations in tin-plate mill plants whose customary working time per week was 5 days or turns, or 6 days, or 7 days, or variations thereof, are shown in Table 44. It will be noticed that the customary working time of a large per cent of the employees in this department was "5 days, 5 days, and 6 days in rotation." In all of the plants covered the regular turn employees were divided into 3 crews, each working 8 hours per turn, 5 turns per week, Monday to Friday, inclusive, with 1 crew working an extra turn Saturday morning. Each crew advances one turn each week, thus giving to each the extra Saturday turn every third week. Two sets of figures are shown for the 11 plants reported for 1914 and 1915, the first covering only the principal productive occupations as shown for all the preceding groups of years, and therefore strictly comparable with them, and the second including the unclassified occupations (see pp. 55 and 56), tabulated for 1914 and 1915 for the first time. The inclusion of these occupations makes a greater change in this table for tin-plate mills, and in that for sheet mills as well, than for any other departments, owing to the general custom of sheet and tin-plate hot-mill employees in the principal productive occupations of working three turns per day, while employees in the unclassified occupations, being largely mechanics or laborers, work 6 days to a large extent.

TABLE 44.—NUMBER AND PER CENT OF EMPLOYEES WORKING EACH SPECIFIED NUMBER OF DAYS PER WEEK, BY YEARS, 1910 TO 1915—*TIN-PLATE MILLS*.

[The figures for each group of years are for identical plants.]

| District, and number of plants. | Year. | Number of employees. | Number of employees whose customary working time per week was— |                                |                                         |         |                                | Per cent of employees whose customary working time per week was— |         |                                |                                         |         |                                |         |  |
|---------------------------------|-------|----------------------|----------------------------------------------------------------|--------------------------------|-----------------------------------------|---------|--------------------------------|------------------------------------------------------------------|---------|--------------------------------|-----------------------------------------|---------|--------------------------------|---------|--|
|                                 |       |                      | 5 days.                                                        | 5 days and 6 days alternately. | 5 days, 5 days, and 6 days in rotation. | 6 days. | 6 days and 7 days alternately. | 7 days.                                                          | 5 days. | 5 days and 6 days alternately. | 5 days, 5 days, and 6 days in rotation. | 6 days. | 6 days and 7 days alternately. | 7 days. |  |
|                                 |       |                      |                                                                |                                |                                         |         |                                |                                                                  |         |                                |                                         |         |                                |         |  |
| Pittsburgh:                     |       |                      |                                                                |                                |                                         |         |                                |                                                                  |         |                                |                                         |         |                                |         |  |
| 5 plants.....                   | 1910  | 2,149                | 2                                                              | 12                             | 1,702                                   | 433     | .....                          | .....                                                            | (1)     | 1                              | 79                                      | 20      | .....                          | .....   |  |
|                                 | 1911  | 2,310                | 2                                                              | 11                             | 1,839                                   | 457     | .....                          | 1                                                                | (1)     | 1                              | 80                                      | 20      | .....                          | (1)     |  |
| 6 plants.....                   | 1911  | 2,487                | 2                                                              | 11                             | 1,959                                   | 514     | .....                          | 1                                                                | (1)     | (1)                            | 79                                      | 21      | .....                          | (1)     |  |
|                                 | 1912  | 2,694                | .....                                                          | 41                             | 2,128                                   | 525     | .....                          | .....                                                            | .....   | 2                              | 79                                      | 20      | .....                          | .....   |  |
| 6 plants.....                   | 1912  | 2,739                | .....                                                          | 48                             | 2,132                                   | 552     | .....                          | 7                                                                | .....   | 2                              | 78                                      | 20      | .....                          | (1)     |  |
|                                 | 1913  | 2,778                | .....                                                          | 16                             | 2,095                                   | 665     | 2                              | .....                                                            | .....   | 1                              | 75                                      | 24      | (1)                            | .....   |  |
| 6 plants.....                   | 1913  | 2,603                | .....                                                          | 64                             | 1,995                                   | 604     | .....                          | .....                                                            | .....   | 2                              | 75                                      | 23      | .....                          | .....   |  |
|                                 | 1914  | 2,560                | .....                                                          | 84                             | 1,927                                   | 547     | .....                          | 2                                                                | .....   | 3                              | 75                                      | 21      | .....                          | (1)     |  |
| 6 plants.....                   | 1914  | 2,514                | .....                                                          | 84                             | 1,888                                   | 540     | .....                          | 2                                                                | .....   | 3                              | 75                                      | 21      | .....                          | (1)     |  |
|                                 | 1915  | 2,517                | .....                                                          | 41                             | 1,832                                   | 624     | .....                          | .....                                                            | .....   | 2                              | 74                                      | 25      | .....                          | .....   |  |
| 6 plants.....                   | 1914  | 3,518                | 2                                                              | 210                            | 2,030                                   | 1,238   | .....                          | 38                                                               | (1)     | 6                              | 58                                      | 35      | .....                          | 1       |  |
|                                 | 1915  | 3,485                | 3                                                              | 181                            | 1,984                                   | 1,277   | 6                              | 34                                                               | (1)     | 5                              | 57                                      | 37      | (1)                            | 1       |  |
| Great Lakes and Middle West:    |       |                      |                                                                |                                |                                         |         |                                |                                                                  |         |                                |                                         |         |                                |         |  |
| 4 plants.....                   | 1913  | 1,932                | .....                                                          | .....                          | 1,434                                   | 528     | .....                          | .....                                                            | .....   | .....                          | 73                                      | 27      | .....                          | .....   |  |
|                                 | 1914  | 1,836                | .....                                                          | .....                          | 1,344                                   | 462     | .....                          | .....                                                            | .....   | .....                          | 75                                      | 25      | .....                          | .....   |  |
| 5 plants.....                   | 1914  | 1,870                | .....                                                          | .....                          | 1,338                                   | 462     | .....                          | .....                                                            | .....   | .....                          | 74                                      | 26      | .....                          | .....   |  |
|                                 | 1915  | 1,955                | .....                                                          | .....                          | 1,477                                   | 477     | .....                          | 1                                                                | .....   | .....                          | 76                                      | 24      | .....                          | (1)     |  |
| 5 plants.....                   | 1914  | 2,515                | 2                                                              | 4                              | 1,458                                   | 1,007   | 16                             | 28                                                               | (1)     | (1)                            | 58                                      | 49      | 1                              | 1       |  |
|                                 | 1915  | 2,662                | .....                                                          | .....                          | 1,548                                   | 1,002   | 14                             | 98                                                               | .....   | .....                          | 58                                      | 38      | 1                              | 4       |  |
| Total:                          |       |                      |                                                                |                                |                                         |         |                                |                                                                  |         |                                |                                         |         |                                |         |  |
| 5 plants.....                   | 1910  | 2,149                | 2                                                              | 12                             | 1,702                                   | 433     | .....                          | .....                                                            | (1)     | 1                              | 79                                      | 20      | .....                          | .....   |  |
|                                 | 1911  | 2,310                | 2                                                              | 11                             | 1,839                                   | 457     | .....                          | 1                                                                | (1)     | 1                              | 80                                      | 20      | .....                          | (1)     |  |
| 6 plants.....                   | 1911  | 2,487                | 2                                                              | 11                             | 1,959                                   | 514     | .....                          | 1                                                                | (1)     | (1)                            | 79                                      | 21      | .....                          | (1)     |  |
|                                 | 1912  | 2,694                | .....                                                          | 41                             | 2,128                                   | 525     | .....                          | .....                                                            | .....   | 2                              | 79                                      | 20      | .....                          | .....   |  |
| 6 plants.....                   | 1912  | 2,739                | .....                                                          | 48                             | 2,132                                   | 552     | .....                          | 7                                                                | .....   | 2                              | 78                                      | 20      | .....                          | (1)     |  |
|                                 | 1913  | 2,778                | .....                                                          | 16                             | 2,095                                   | 665     | 2                              | .....                                                            | .....   | 1                              | 75                                      | 24      | (1)                            | .....   |  |
| 10 plants.....                  | 1913  | 4,625                | .....                                                          | 64                             | 3,429                                   | 1,132   | .....                          | .....                                                            | .....   | 1                              | 74                                      | 24      | .....                          | .....   |  |
|                                 | 1914  | 4,396                | .....                                                          | 84                             | 3,301                                   | 1,009   | .....                          | 2                                                                | .....   | 2                              | 75                                      | 23      | .....                          | (1)     |  |
| 11 plants.....                  | 1914  | 4,314                | .....                                                          | 84                             | 3,226                                   | 1,002   | .....                          | 2                                                                | .....   | 2                              | 75                                      | 23      | .....                          | (1)     |  |
|                                 | 1915  | 4,442                | .....                                                          | 41                             | 3,329                                   | 1,101   | .....                          | 1                                                                | .....   | 1                              | 74                                      | 25      | .....                          | (1)     |  |
| 11 plants.....                  | 1914  | 6,033                | 4                                                              | 214                            | 3,488                                   | 2,245   | 16                             | 66                                                               | (1)     | 4                              | 58                                      | 37      | (1)                            | 1       |  |
|                                 | 1915  | 6,147                | 3                                                              | 181                            | 3,532                                   | 2,299   | 20                             | 132                                                              | (1)     | 3                              | 57                                      | 37      | (1)                            | 2       |  |

<sup>1</sup> Less than one-half of 1 per cent.

In both tin-plate mills and sheet mills the custom of two heaters working level-handed (dividing the pay evenly), instead of one heater working with a helper, has been increasing in recent years. Beginning with 1913, in both these departments a new group, "Heaters, level-handed," is included in this report. In preceding years the scattering level-handed work was shown with that of the regular heaters. In this department doublers are treated in the same way, beginning with 1913.

Two general tables of actual data are presented for this department, as follows:

Table S.—Full-time hours per week, rates of wages per hour, and full-time weekly earnings in the United States, by years, 1910 to 1915.

Table T.—Full-time hours per week, rates of wages per hour, and full-time weekly earnings in each district, by years, 1913 to 1915.

The facts from Table S are summarized in Table 42, percentages being used instead of the actual figures for classified hours and rates of wages.

The order in which the occupations are given in Tables S and T and the table of relative numbers follows that of the processes of manufacture. "Identical plants," as used in the tables of this report, are identical units of identical establishments reporting the same occupations in each of two or more consecutive years. For a more extended explanation see page 58.

Descriptions of the occupations which are specified in the tables of this chapter and of other occupations of the tin-plate mill department included in the two groups designated as "Unclassified—productive," and "Unclassified—nonproductive," are to be found in the Glossary of Occupations, pages 523 to 526.

TABLE S.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1910 TO 1915—

[The figures for each group of

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Rollers:                          |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 2        | 5 plants.....                     | 1910  | 174                  | 42.7                              | \$1.025                         | \$43.73                            | 174                                            |                      |                 |    |                      |    |                      |    |
|          |                                   | 1911  | 189                  | 42.7                              | 1.103                           | 47.05                              | 189                                            |                      |                 |    |                      |    |                      |    |
| 3        | 6 plants.....                     | 1911  | 201                  | 42.7                              | 1.109                           | 47.33                              | 201                                            |                      |                 |    |                      |    |                      |    |
| 4        |                                   | 1912  | 229                  | 42.7                              | 1.097                           | 46.82                              | 229                                            |                      |                 |    |                      |    |                      |    |
| 5        |                                   | 1913  | 231                  | 42.7                              | 1.119                           | 47.76                              | 231                                            |                      |                 |    |                      |    |                      |    |
| 6        | 9 plants.....                     | 1913  | 356                  | 42.7                              | 1.139                           | 48.59                              | 356                                            |                      |                 |    |                      |    |                      |    |
| 7        |                                   | 1914  | 334                  | 42.7                              | 1.111                           | 47.39                              | 334                                            |                      |                 |    |                      |    |                      |    |
| 8        | 10 plants.....                    | 1914  | 345                  | 42.7                              | 1.115                           | 47.59                              | 345                                            |                      |                 |    |                      |    |                      |    |
| 9        |                                   | 1915  | 349                  | 42.7                              | 1.106                           | 47.17                              | 349                                            |                      |                 |    |                      |    |                      |    |
| 10       | Roughers:                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 11       | 5 plants.....                     | 1910  | 174                  | 42.7                              | .425                            | 18.14                              | 174                                            |                      |                 |    |                      |    |                      |    |
|          |                                   | 1911  | 184                  | 42.7                              | .506                            | 21.60                              | 184                                            |                      |                 |    |                      |    |                      |    |
| 12       | 6 plants.....                     | 1911  | 196                  | 42.7                              | .507                            | 21.63                              | 196                                            |                      |                 |    |                      |    |                      |    |
| 13       |                                   | 1912  | 216                  | 42.7                              | .513                            | 21.89                              | 216                                            |                      |                 |    |                      |    |                      |    |
| 14       |                                   | 1913  | 214                  | 42.7                              | .553                            | 23.59                              | 214                                            |                      |                 |    |                      |    |                      |    |
| 15       | 10 plants.....                    | 1913  | 380                  | 42.7                              | .533                            | 22.73                              | 380                                            |                      |                 |    |                      |    |                      |    |
| 16       |                                   | 1914  | 356                  | 42.7                              | .557                            | 23.78                              | 356                                            |                      |                 |    |                      |    |                      |    |
| 17       | 11 plants.....                    | 1914  | 367                  | 42.7                              | .560                            | 23.87                              | 367                                            |                      |                 |    |                      |    |                      |    |
| 18       |                                   | 1915  | 366                  | 42.7                              | .562                            | 23.96                              | 366                                            |                      |                 |    |                      |    |                      |    |
| 19       | Catchers:                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 20       | 5 plants.....                     | 1910  | 174                  | 42.7                              | .427                            | 18.23                              | 174                                            |                      |                 |    |                      |    |                      |    |
|          |                                   | 1911  | 186                  | 42.7                              | .481                            | 20.52                              | 186                                            |                      |                 |    |                      |    |                      |    |
| 21       | 6 plants.....                     | 1911  | 198                  | 42.7                              | .487                            | 20.79                              | 198                                            |                      |                 |    |                      |    |                      |    |
| 22       |                                   | 1912  | 239                  | 42.7                              | .403                            | 17.20                              | 239                                            |                      |                 |    |                      |    |                      |    |
| 23       |                                   | 1913  | 238                  | 42.7                              | .427                            | 18.23                              | 238                                            |                      |                 |    |                      |    |                      |    |
| 24       | 10 plants.....                    | 1913  | 354                  | 42.7                              | .463                            | 19.74                              | 354                                            |                      |                 |    |                      |    |                      |    |
| 25       |                                   | 1914  | 335                  | 42.7                              | .462                            | 19.73                              | 335                                            |                      |                 |    |                      |    |                      |    |
| 26       | 11 plants.....                    | 1914  | 347                  | 42.7                              | .468                            | 19.95                              | 347                                            |                      |                 |    |                      |    |                      |    |
| 27       |                                   | 1915  | 361                  | 42.7                              | .489                            | 20.87                              | 361                                            |                      |                 |    |                      |    |                      |    |
| 28       | Screw boys:                       |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 29       | 5 plants.....                     | 1910  | 174                  | 42.7                              | .308                            | 13.15                              | 174                                            |                      |                 |    |                      |    |                      |    |
|          |                                   | 1911  | 186                  | 42.7                              | .342                            | 14.61                              | 186                                            |                      |                 |    |                      |    |                      |    |
| 30       | 6 plants.....                     | 1911  | 198                  | 42.7                              | .345                            | 14.72                              | 198                                            |                      |                 |    |                      |    |                      |    |
| 31       |                                   | 1912  | 221                  | 42.7                              | .352                            | 15.03                              | 221                                            |                      |                 |    |                      |    |                      |    |
| 32       |                                   | 1913  | 218                  | 42.7                              | .373                            | 15.91                              | 218                                            |                      |                 |    |                      |    |                      |    |
| 33       | 10 plants.....                    | 1913  | 387                  | 42.7                              | .366                            | 15.64                              | 387                                            |                      |                 |    |                      |    |                      |    |
| 34       |                                   | 1914  | 372                  | 42.7                              | .384                            | 16.37                              | 372                                            |                      |                 |    |                      |    |                      |    |
| 35       | 11 plants.....                    | 1914  | 384                  | 42.7                              | .385                            | 16.43                              | 384                                            |                      |                 |    |                      |    |                      |    |
| 36       |                                   | 1915  | 372                  | 42.7                              | .389                            | 16.59                              | 372                                            |                      |                 |    |                      |    |                      |    |
| 37       | Doublers:                         |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 38       | 5 plants.....                     | 1910  | 174                  | 42.7                              | .632                            | 26.97                              | 174                                            |                      |                 |    |                      |    |                      |    |
|          |                                   | 1911  | 193                  | 42.7                              | .698                            | 29.80                              | 193                                            |                      |                 |    |                      |    |                      |    |
| 39       | 6 plants.....                     | 1911  | 205                  | 42.7                              | .706                            | 30.13                              | 205                                            |                      |                 |    |                      |    |                      |    |
| 40       |                                   | 1912  | 247                  | 42.7                              | .677                            | 28.90                              | 247                                            |                      |                 |    |                      |    |                      |    |
| 41       |                                   | 1913  | 251                  | 42.7                              | .699                            | 29.81                              | 251                                            |                      |                 |    |                      |    |                      |    |
| 42       | 10 plants.....                    | 1913  | 341                  | 42.7                              | .740                            | 31.58                              | 341                                            |                      |                 |    |                      |    |                      |    |
| 43       |                                   | 1914  | 324                  | 42.7                              | .734                            | 31.32                              | 324                                            |                      |                 |    |                      |    |                      |    |
| 44       | 10 plants.....                    | 1914  | 316                  | 42.7                              | .734                            | 31.33                              | 316                                            |                      |                 |    |                      |    |                      |    |
| 45       |                                   | 1915  | 322                  | 42.7                              | .718                            | 30.63                              | 322                                            |                      |                 |    |                      |    |                      |    |
| 46       | Doublers, level-                  |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 47       | handed: 4 plants.....             | 1913  | 46                   | 42.7                              | .567                            | 24.20                              | 46                                             |                      |                 |    |                      |    |                      |    |
|          |                                   | 1914  | 48                   | 42.7                              | .564                            | 24.06                              | 48                                             |                      |                 |    |                      |    |                      |    |
| 48       | 5 plants.....                     | 1914  | 54                   | 42.7                              | .559                            | 23.84                              | 54                                             |                      |                 |    |                      |    |                      |    |
| 49       |                                   | 1915  | 62                   | 42.7                              | .561                            | 23.92                              | 62                                             |                      |                 |    |                      |    |                      |    |

AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
TIN-PLATE MILLS.

years are for identical plants.]

| Employees whose rates of wages per hour were— |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | Line<br>No. |
|-----------------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|-----------------------------|-------------|
| 10<br>and<br>under<br>12<br>cents.            | 12<br>and<br>under<br>14<br>cents. | 14<br>and<br>under<br>16<br>cents. | 16<br>and<br>under<br>18<br>cents. | 18<br>and<br>under<br>20<br>cents. | 20<br>and<br>under<br>25<br>cents. | 25<br>and<br>under<br>30<br>cents. | 30<br>and<br>under<br>40<br>cents. | 40<br>and<br>under<br>50<br>cents. | 50<br>and<br>under<br>60<br>cents. | 60<br>and<br>under<br>70<br>cents. | 70<br>cents<br>and<br>over. |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 1                                  | 5                                  | 167                         | 1           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 188                         | 2           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 200                         | 3           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 229                         | 4           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 231                         | 5           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 355                         | 6           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  |                                    | 333                         | 7           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  |                                    | 344                         | 8           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 3                                  | 346                         | 9           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 60                                 | 99                                 | 15                                 |                                    |                             | 10          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 80                                 | 104                                |                                    |                             | 11          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 80                                 | 116                                |                                    |                             | 12          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 83                                 | 128                                | 4                                  |                             | 13          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 75                                 | 42                                 | 96                                 | 1                           | 14          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 5                                  | 154                                | 127                                | 75                                 | 19                          | 15          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 80                                 | 170                                | 88                                 | 17                          | 16          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 80                                 | 172                                | 97                                 | 17                          | 17          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 71                                 | 187                                | 96                                 | 11                          | 18          |
|                                               |                                    |                                    | 1                                  | 2                                  | 9                                  | 22                                 | 39                                 | 8                                  | 93                                 |                                    |                             | 19          |
|                                               |                                    |                                    |                                    |                                    | 2                                  | 4                                  | 59                                 | 21                                 | 100                                |                                    |                             | 20          |
|                                               |                                    |                                    |                                    |                                    | 2                                  | 4                                  | 59                                 | 21                                 | 112                                |                                    |                             | 21          |
|                                               |                                    |                                    |                                    |                                    | 6                                  | 8                                  | 79                                 | 129                                | 13                                 | 4                                  |                             | 22          |
|                                               |                                    |                                    |                                    |                                    |                                    | 5                                  | 77                                 | 131                                | 16                                 | 8                                  | 1                           | 23          |
|                                               |                                    |                                    |                                    |                                    |                                    | 3                                  | 79                                 | 160                                | 91                                 | 17                                 | 4                           | 24          |
|                                               |                                    |                                    |                                    |                                    |                                    | 7                                  | 90                                 | 139                                | 60                                 | 31                                 | 8                           | 25          |
|                                               |                                    |                                    |                                    |                                    |                                    | 7                                  | 90                                 | 139                                | 64                                 | 39                                 | 8                           | 26          |
|                                               |                                    |                                    |                                    |                                    |                                    | 46                                 | 163                                | 115                                | 36                                 | 1                                  |                             | 27          |
|                                               |                                    |                                    | 1                                  | 2                                  | 26                                 | 29                                 | 116                                |                                    |                                    |                                    |                             | 28          |
|                                               |                                    |                                    |                                    |                                    | 6                                  | 35                                 | 144                                | 1                                  |                                    |                                    |                             | 29          |
|                                               |                                    |                                    |                                    |                                    | 6                                  | 35                                 | 156                                | 1                                  |                                    |                                    |                             | 30          |
|                                               |                                    |                                    |                                    |                                    | 1                                  | 42                                 | 86                                 | 92                                 |                                    |                                    |                             | 31          |
|                                               |                                    |                                    |                                    |                                    | 1                                  | 36                                 | 80                                 | 101                                |                                    |                                    |                             | 32          |
|                                               |                                    |                                    |                                    |                                    | 3                                  | 50                                 | 223                                | 104                                | 7                                  |                                    |                             | 33          |
|                                               |                                    |                                    |                                    |                                    | 1                                  | 5                                  | 244                                | 113                                | 8                                  | 1                                  |                             | 34          |
|                                               |                                    |                                    |                                    |                                    | 1                                  | 5                                  | 247                                | 122                                | 8                                  | 1                                  |                             | 35          |
|                                               |                                    |                                    |                                    |                                    | 11                                 |                                    | 214                                | 139                                | 8                                  |                                    |                             | 36          |
|                                               |                                    |                                    |                                    |                                    | 1                                  | 1                                  | 8                                  | 24                                 | 29                                 | 23                                 | 88                          | 37          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 5                                  | 26                                 | 80                                 |                             | 38          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 5                                  | 26                                 | 80                                 | 94                          | 39          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 14                                 | 66                                 | 28                                 | 139                         | 40          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 10                                 | 25                                 | 64                                 | 152                         | 41          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 5                                  | 45                                 | 95                                 | 195                         | 42          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 30                                 | 106                                | 184                         | 43          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 30                                 | 106                                | 176                         | 44          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 26                                 | 114                                | 181                         | 45          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 8                                  | 24                                 | 10                                 | 4                           | 46          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 6                                  | 28                                 | 12                                 | 2                           | 47          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 8                                  | 32                                 | 12                                 | 2                           | 48          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 18                                 | 26                                 | 12                                 | 6                           | 49          |

TABLE S.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1910 TO 1915—

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                       |                  |     |                       |                       |     |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|-----------------------|------------------|-----|-----------------------|-----------------------|-----|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56. | 56 and under 60. | 60. | Over 60 and under 72. | Over 72 and under 84. | 84. |
| 1        | Doublers' helpers:                |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |                       |     |
| 2        | 5 plants.....                     | 1910  | 174                  | 42.7                              | \$0.324                         | \$13.82                            | 174                                            |                       |                  |     |                       |                       |     |
|          |                                   | 1911  | 179                  | 42.7                              | .353                            | 15.05                              | 179                                            |                       |                  |     |                       |                       |     |
| 3        | 6 plants.....                     | 1911  | 191                  | 42.7                              | .351                            | 14.97                              | 191                                            |                       |                  |     |                       |                       |     |
| 4        |                                   | 1912  | 193                  | 42.7                              | .370                            | 15.81                              | 193                                            |                       |                  |     |                       |                       |     |
| 5        |                                   | 1913  | 190                  | 42.7                              | .393                            | 16.77                              | 190                                            |                       |                  |     |                       |                       |     |
| 6        | 10 plants.....                    | 1913  | 344                  | 42.7                              | .362                            | 15.43                              | 344                                            |                       |                  |     |                       |                       |     |
| 7        |                                   | 1914  | 330                  | 42.7                              | .387                            | 16.49                              | 330                                            |                       |                  |     |                       |                       |     |
| 8        | 10 plants.....                    | 1914  | 322                  | 42.7                              | .380                            | 16.21                              | 322                                            |                       |                  |     |                       |                       |     |
| 9        |                                   | 1915  | 324                  | 42.7                              | .402                            | 17.17                              | 324                                            |                       |                  |     |                       |                       |     |
| 10       | Heaters:                          |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |                       |     |
| 11       | 5 plants.....                     | 1910  | 174                  | 42.7                              | .648                            | 27.63                              | 174                                            |                       |                  |     |                       |                       |     |
|          |                                   | 1911  | 203                  | 42.7                              | .703                            | 30.24                              | 203                                            |                       |                  |     |                       |                       |     |
| 12       | 6 plants.....                     | 1911  | 215                  | 42.7                              | .714                            | 30.47                              | 215                                            |                       |                  |     |                       |                       |     |
| 13       |                                   | 1912  | 314                  | 42.7                              | .675                            | 28.78                              | 314                                            |                       |                  |     |                       |                       |     |
| 14       |                                   | 1913  | 312                  | 42.7                              | .679                            | 28.99                              | 312                                            |                       |                  |     |                       |                       |     |
| 15       | 9 plants.....                     | 1913  | 156                  | 42.7                              | .750                            | 31.99                              | 156                                            |                       |                  |     |                       |                       |     |
| 16       |                                   | 1914  | 142                  | 42.7                              | .752                            | 32.10                              | 142                                            |                       |                  |     |                       |                       |     |
| 17       | 9 plants.....                     | 1914  | 136                  | 42.7                              | .749                            | 31.94                              | 136                                            |                       |                  |     |                       |                       |     |
| 18       |                                   | 1915  | 211                  | 42.7                              | .725                            | 30.95                              | 211                                            |                       |                  |     |                       |                       |     |
| 19       | Heaters, level-handed:            |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |                       |     |
| 20       | 6 plants.....                     | 1913  | 414                  | 42.7                              | .595                            | 25.28                              | 414                                            |                       |                  |     |                       |                       |     |
|          |                                   | 1914  | 430                  | 42.7                              | .622                            | 26.53                              | 430                                            |                       |                  |     |                       |                       |     |
| 21       | 6 plants.....                     | 1914  | 332                  | 42.7                              | .616                            | 26.29                              | 332                                            |                       |                  |     |                       |                       |     |
| 22       |                                   | 1915  | 294                  | 42.7                              | .611                            | 26.08                              | 294                                            |                       |                  |     |                       |                       |     |
| 23       | Heaters' helpers:                 |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |                       |     |
| 24       | 4 plants.....                     | 1910  | 165                  | 42.7                              | .348                            | 14.84                              | 165                                            |                       |                  |     |                       |                       |     |
|          |                                   | 1911  | 154                  | 42.7                              | .438                            | 18.71                              | 154                                            |                       |                  |     |                       |                       |     |
| 25       | 5 plants.....                     | 1911  | 166                  | 42.7                              | .436                            | 18.60                              | 166                                            |                       |                  |     |                       |                       |     |
| 26       |                                   | 1912  | 109                  | 42.7                              | .396                            | 16.92                              | 109                                            |                       |                  |     |                       |                       |     |
| 27       |                                   | 1913  | 103                  | 42.7                              | .425                            | 18.15                              | 103                                            |                       |                  |     |                       |                       |     |
| 28       | 8 plants.....                     | 1913  | 147                  | 42.7                              | .430                            | 18.36                              | 147                                            |                       |                  |     |                       |                       |     |
| 29       |                                   | 1914  | 127                  | 42.7                              | .476                            | 20.32                              | 127                                            |                       |                  |     |                       |                       |     |
| 30       | 8 plants.....                     | 1914  | 121                  | 42.7                              | .459                            | 19.57                              | 121                                            |                       |                  |     |                       |                       |     |
| 31       |                                   | 1915  | 202                  | 42.7                              | .455                            | 19.43                              | 202                                            |                       |                  |     |                       |                       |     |
| 32       | Shearmen:                         |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |                       |     |
| 33       | 5 plants.....                     | 1910  | 58                   | 52.7                              | .497                            | 25.68                              | 31                                             | 7                     |                  | 20  |                       |                       |     |
|          |                                   | 1911  | 61                   | 53.1                              | .548                            | 28.50                              | 31                                             | 7                     |                  | 23  |                       |                       |     |
| 34       | 6 plants.....                     | 1911  | 65                   | 52.8                              | .555                            | 28.72                              | 35                                             | 7                     |                  | 23  |                       |                       |     |
| 35       |                                   | 1912  | 72                   | 51.8                              | .573                            | 29.00                              | 43                                             | 7                     |                  | 22  |                       |                       |     |
| 36       |                                   | 1913  | 73                   | 51.9                              | .606                            | 30.66                              | 43                                             | 7                     |                  | 23  |                       |                       |     |
| 37       | 9 plants.....                     | 1913  | 126                  | 56.5                              | .485                            | 27.34                              | 7                                              | 35                    | 68               | 16  |                       |                       |     |
| 38       |                                   | 1914  | 116                  | 56.9                              | .486                            | 27.61                              | 3                                              | 35                    | 62               | 16  |                       |                       |     |
| 39       | 8 plants.....                     | 1914  | 113                  | 57.3                              | .479                            | 27.52                              |                                                | 35                    | 62               | 16  |                       |                       |     |
| 40       |                                   | 1915  | 112                  | 57.3                              | .514                            | 29.55                              |                                                | 34                    | 62               | 16  |                       |                       |     |
| 41       | Shearmen's helpers:               |       |                      |                                   |                                 |                                    |                                                |                       |                  |     |                       |                       |     |
| 42       | 2 plants.....                     | 1910  | 25                   | 61.8                              | .118                            | 7.31                               |                                                |                       |                  | 29  | 5                     |                       |     |
| 43       |                                   | 1911  | 31                   | 59.7                              | .118                            | 7.02                               |                                                |                       |                  | 23  |                       |                       |     |
|          |                                   | 1912  | 29                   | 58.8                              | .123                            | 7.18                               |                                                | 7                     |                  | 22  |                       |                       |     |
| 44       | 3 plants.....                     | 1912  | 35                   | 57.6                              | .136                            | 7.71                               | 5                                              | 7                     |                  | 22  |                       | 1                     |     |
| 45       |                                   | 1913  | 38                   | 58.7                              | .165                            | 9.51                               | 8                                              |                       |                  | 23  | 7                     |                       |     |
| 46       | 4 plants.....                     | 1913  | 43                   | 55.8                              | .165                            | 9.13                               | 8                                              | 22                    |                  | 6   | 7                     |                       |     |
| 47       |                                   | 1914  | 42                   | 55.3                              | .168                            | 9.18                               | 7                                              | 22                    |                  | 6   | 7                     |                       |     |
| 48       | 3 plants.....                     | 1914  | 35                   | 56.7                              | .150                            | 8.53                               |                                                | 22                    |                  | 6   | 7                     |                       |     |
| 49       |                                   | 1915  | 33                   | 56.5                              | .150                            | 8.51                               |                                                | 22                    |                  | 5   | 6                     |                       |     |

AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
TIN-PLATE MILLS—Continued.

| Employees whose rates of wages per hour were— |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | Line<br>No. |
|-----------------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|-----------------------------|-------------|
| 10<br>and<br>under<br>12<br>cents.            | 12<br>and<br>under<br>14<br>cents. | 14<br>and<br>under<br>16<br>cents. | 16<br>and<br>under<br>18<br>cents. | 18<br>and<br>under<br>20<br>cents. | 20<br>and<br>under<br>25<br>cents. | 25<br>and<br>under<br>30<br>cents. | 30<br>and<br>under<br>40<br>cents. | 40<br>and<br>under<br>50<br>cents. | 50<br>and<br>under<br>60<br>cents. | 60<br>and<br>under<br>70<br>cents. | 70<br>cents<br>and<br>over. |             |
|                                               |                                    |                                    |                                    |                                    |                                    | 60                                 | 114                                |                                    |                                    |                                    |                             | 1           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 179                                |                                    |                                    |                                    |                             | 2           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 191                                |                                    |                                    |                                    |                             | 3           |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  | 168                                | 23                                 |                                    |                                    |                             | 4           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 91                                 | 99                                 |                                    |                                    |                             | 5           |
|                                               |                                    |                                    |                                    |                                    | 4                                  | 49                                 | 215                                | 60                                 | 15                                 | 1                                  |                             | 6           |
|                                               |                                    |                                    |                                    |                                    | 4                                  | 22                                 | 164                                | 119                                | 21                                 |                                    |                             | 7           |
|                                               |                                    |                                    |                                    |                                    | 4                                  | 22                                 | 170                                | 118                                | 8                                  |                                    |                             | 8           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 156                                | 158                                | 6                                  | 3                                  | 1                           | 9           |
|                                               |                                    |                                    |                                    |                                    | 1                                  | 1                                  | 10                                 | 23                                 | 33                                 | 13                                 | 93                          | 10          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 22                                 | 123                                | 58                          | 11          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 22                                 | 123                                | 70                          | 12          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 74                                 | 181                                | 59                          | 13          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 29                                 | 193                                | 90                          | 14          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 9                                  | 50                                 | 97                          | 15          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 11                                 | 31                                 | 100                         | 16          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 11                                 | 31                                 | 94                          | 17          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 25                                 | 67                                 | 119                         | 18          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 46                                 | 174                                | 148                                | 44                          | 19          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 12                                 | 154                                | 206                                | 56                          | 20          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 14                                 | 134                                | 138                                | 44                          | 21          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 12                                 | 132                                | 116                                | 34                          | 22          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 167                                |                                    |                                    |                                    |                             | 23          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 92                                 | 2                                  | 60                                 |                                    |                             | 24          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 92                                 | 14                                 | 60                                 |                                    |                             | 25          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 82                                 | 11                                 | 16                                 |                                    |                             | 26          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 55                                 | 20                                 | 24                                 |                                    |                             | 27          |
|                                               |                                    |                                    |                                    |                                    |                                    | 1                                  | 67                                 | 49                                 | 22                                 | 5                                  | 1                           | 28          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 11                                 | 69                                 | 28                                 | 11                                 |                             | 29          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 27                                 | 76                                 | 11                                 | 11                                 |                             | 30          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 35                                 | 132                                | 29                                 | 4                                  | 2                           | 31          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 14                                 | 12                                 | 32                                 |                                    |                             | 32          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 25                                 | 2                                  | 30                                 |                             | 33          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 25                                 | 2                                  | 34                                 |                             | 34          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 12                                 | 18                                 | 11                                 | 3                                  | 28                          | 35          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 8                                  | 21                                 | 2                                  | 12                                 | 30                          | 36          |
|                                               |                                    |                                    |                                    |                                    |                                    | 6                                  | 23                                 | 42                                 | 38                                 | 15                                 | 2                           | 37          |
|                                               |                                    |                                    |                                    |                                    |                                    | 1                                  | 16                                 | 50                                 | 42                                 | 4                                  | 3                           | 38          |
|                                               |                                    |                                    |                                    |                                    |                                    | 1                                  | 16                                 | 50                                 | 42                                 | 3                                  | 1                           | 39          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 12                                 | 42                                 | 38                                 | 20                                 |                             | 40          |
| 13                                            | 7                                  | 5                                  |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 41          |
| 14                                            | 16                                 | 1                                  |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 42          |
| 10                                            | 12                                 | 5                                  |                                    | 2                                  |                                    |                                    |                                    |                                    |                                    |                                    |                             | 43          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
| 10                                            | 12                                 | 5                                  |                                    | 3                                  | 1                                  | 4                                  |                                    |                                    |                                    |                                    |                             | 44          |
|                                               | 12                                 | 11                                 |                                    | 7                                  |                                    | 7                                  | 1                                  |                                    |                                    |                                    |                             | 45          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               | 3                                  | 25                                 |                                    | 7                                  |                                    |                                    | 1                                  |                                    |                                    |                                    |                             | 46          |
|                                               | 3                                  | 25                                 |                                    | 7                                  |                                    | 3                                  | 4                                  |                                    |                                    |                                    |                             | 47          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               | 3                                  | 25                                 |                                    | 7                                  |                                    |                                    |                                    |                                    |                                    |                                    |                             | 48          |
|                                               | 2                                  | 25                                 |                                    | 6                                  |                                    |                                    |                                    |                                    |                                    |                                    |                             | 49          |

TABLE S.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1910 TO 1915—

| Line No. | Occupation and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                  |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Openers, male:                   | 1910  | 94                   | 57.5                              | \$0.221                         | \$12.72                            |                                                | 15                   | 79              |    |                      |    |                      |    |
| 2        | 3 plants.....                    | 1911  | 76                   | 57.3                              | .262                            | 15.02                              |                                                | 19                   | 57              |    |                      |    |                      |    |
| 3        | 4 plants.....                    | 1911  | 84                   | 57.3                              | .266                            | 15.24                              |                                                | 19                   | 65              |    |                      |    |                      |    |
| 4        |                                  | 1912  | 89                   | 57.5                              | .298                            | 17.12                              |                                                | 14                   | 75              |    |                      |    |                      |    |
| 5        | 5 plants.....                    | 1912  | 93                   | 56.9                              | .296                            | 16.86                              | 4                                              | 14                   | 75              |    |                      |    |                      |    |
| 6        |                                  | 1913  | 97                   | 57.7                              | .310                            | 17.89                              |                                                | 16                   | 73              | 8  |                      |    |                      |    |
| 7        | 7 plants.....                    | 1913  | 210                  | 56.9                              | .274                            | 15.58                              |                                                | 62                   | 148             |    |                      |    |                      |    |
| 8        |                                  | 1914  | 201                  | 56.8                              | .266                            | 15.14                              |                                                | 62                   | 139             |    |                      |    |                      |    |
| 9        |                                  | 1915  | 227                  | 57.2                              | .247                            | 14.13                              |                                                | 56                   | 155             | 16 |                      |    |                      |    |
| 10       | Openers, female:                 | 1910  | 13                   | 45.5                              | .244                            | 11.08                              | 10                                             | 3                    |                 |    |                      |    |                      |    |
| 11       | 2 plants.....                    | 1911  | 17                   | 44.1                              | .231                            | 10.22                              | 15                                             | 2                    |                 |    |                      |    |                      |    |
| 12       | 1 plant.....                     | 1911  | 15                   | 42.7                              | .230                            | 9.81                               | 15                                             |                      |                 |    |                      |    |                      |    |
| 13       |                                  | 1912  | 18                   | 42.7                              | .209                            | 8.93                               | 18                                             |                      |                 |    |                      |    |                      |    |
| 14       |                                  | 1913  | 11                   | 60.0                              | .198                            | 11.89                              |                                                |                      |                 | 11 |                      |    |                      |    |
| 15       | Tinners:                         | 1910  | 224                  | 42.9                              | .402                            | 17.27                              | 220                                            | 4                    |                 |    |                      |    |                      |    |
| 16       | 4 plants.....                    | 1911  | 262                  | 43.0                              | .439                            | 18.92                              | 256                                            | 2                    | 4               |    |                      |    |                      |    |
| 17       | 5 plants.....                    | 1911  | 283                  | 43.0                              | .429                            | 18.48                              | 277                                            | 2                    | 4               |    |                      |    |                      |    |
| 18       |                                  | 1912  | 294                  | 43.4                              | .444                            | 19.28                              | 276                                            | 18                   |                 |    |                      |    |                      |    |
| 19       |                                  | 1913  | 293                  | 42.9                              | .456                            | 19.57                              | 296                                            |                      |                 |    |                      |    |                      |    |
| 20       | 8 plants.....                    | 1913  | 484                  | 43.6                              | .433                            | 18.84                              | 459                                            |                      | 24              | 1  |                      |    |                      |    |
| 21       |                                  | 1914  | 486                  | 43.5                              | .442                            | 19.22                              | 463                                            |                      | 22              | 1  |                      |    |                      |    |
| 22       |                                  | 1915  | 487                  | 43.3                              | .442                            | 19.13                              | 473                                            |                      | 13              | 1  |                      |    |                      |    |
| 23       | Redippers:                       | 1910  | 14                   | 46.2                              | .570                            | 26.56                              | 10                                             | 4                    |                 |    |                      |    |                      |    |
| 24       | 1 plant.....                     | 1911  | 17                   | 47.2                              | .619                            | 29.32                              | 12                                             | 1                    | 4               |    |                      |    |                      |    |
| 25       |                                  | 1912  | 10                   | 55.0                              | .592                            | 32.58                              |                                                | 10                   |                 |    |                      |    |                      |    |
| 26       |                                  | 1913  | 13                   | 46.6                              | .622                            | 29.00                              | 13                                             |                      |                 |    |                      |    |                      |    |
| 27       | 3 plants.....                    | 1913  | 26                   | 53.0                              | .536                            | 28.03                              | 11                                             |                      | 14              | 1  |                      |    |                      |    |
| 28       |                                  | 1914  | 23                   | 53.0                              | .538                            | 28.55                              | 10                                             |                      | 12              | 1  |                      |    |                      |    |
| 29       |                                  | 1915  | 19                   | 51.4                              | .563                            | 28.81                              | 11                                             |                      | 7               | 1  |                      |    |                      |    |
| 30       | Risers:                          | 1910  | 34                   | 44.1                              | .262                            | 11.51                              | 30                                             | 4                    |                 |    |                      |    |                      |    |
| 31       | 2 plants.....                    | 1911  | 39                   | 45.0                              | .279                            | 12.51                              | 33                                             | 2                    | 4               |    |                      |    |                      |    |
| 32       | 3 plants.....                    | 1911  | 42                   | 44.8                              | .275                            | 12.30                              | 36                                             | 2                    | 4               |    |                      |    |                      |    |
| 33       |                                  | 1912  | 30                   | 50.1                              | .239                            | 11.98                              | 12                                             | 18                   |                 |    |                      |    |                      |    |
| 34       |                                  | 1913  | 34                   | 45.1                              | .279                            | 12.59                              | 34                                             |                      |                 |    |                      |    |                      |    |
| 35       | 4 plants.....                    | 1913  | 28                   | 44.8                              | .283                            | 12.69                              | 28                                             |                      |                 |    |                      |    |                      |    |
| 36       |                                  | 1914  | 48                   | 51.3                              | .268                            | 13.70                              | 25                                             |                      | 22              | 1  |                      |    |                      |    |
| 37       |                                  | 1915  | 41                   | 49.5                              | .288                            | 14.16                              | 27                                             |                      | 13              | 1  |                      |    |                      |    |
| 38       | Branners:                        | 1910  | 12                   | 67.8                              | .170                            | 11.52                              |                                                |                      |                 |    | 12                   |    |                      |    |
| 39       | 2 plants.....                    | 1911  | 20                   | 67.7                              | .170                            | 11.50                              |                                                |                      |                 |    | 20                   |    |                      |    |
| 40       |                                  | 1912  | 16                   | 67.7                              | .170                            | 11.51                              |                                                |                      |                 |    | 16                   |    |                      |    |
| 41       |                                  | 1913  | 17                   | 67.7                              | .195                            | 13.20                              |                                                |                      |                 |    | 17                   |    |                      |    |
| 42       | 4 plants.....                    | 1913  | 37                   | 63.7                              | .190                            | 12.14                              |                                                |                      | 16              |    | 17                   | 4  |                      |    |
| 43       |                                  | 1914  | 41                   | 64.1                              | .198                            | 12.69                              |                                                |                      | 16              |    | 21                   | 4  |                      |    |
| 44       |                                  | 1915  | 34                   | 65.4                              | .203                            | 13.22                              |                                                |                      | 8               |    | 26                   |    |                      |    |
| 45       | Assorters, male:                 | 1911  | 2                    | 55.0                              | .263                            | 14.44                              |                                                | 2                    |                 |    |                      |    |                      |    |
| 46       | 1 plant.....                     | 1912  | 2                    | 55.0                              | .275                            | 15.13                              |                                                | 2                    |                 |    |                      |    |                      |    |
| 47       | Assorters, female:               | 1910  | 101                  | 49.7                              | .128                            | 6.41                               | 46                                             | 8                    | 47              |    |                      |    |                      |    |
| 48       | 4 plants.....                    | 1911  | 112                  | 50.2                              | .138                            | 6.97                               | 46                                             | 9                    | 57              |    |                      |    |                      |    |
| 49       | 5 plants.....                    | 1911  | 120                  | 50.7                              | .138                            | 7.03                               | 46                                             | 9                    | 65              |    |                      |    |                      |    |
| 50       |                                  | 1912  | 127                  | 51.4                              | .145                            | 7.39                               | 47                                             | 5                    | 75              |    |                      |    |                      |    |
| 51       |                                  | 1913  | 120                  | 51.5                              | .163                            | 8.37                               | 42                                             | 6                    | 72              |    |                      |    |                      |    |



AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
TIN-PLATE MILLS—Continued.

| Employees whose rates of wages per hour were— |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | Line<br>No. |
|-----------------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|-----------------------------|-------------|
| 10<br>and<br>under<br>12<br>cents.            | 12<br>and<br>under<br>14<br>cents. | 14<br>and<br>under<br>16<br>cents. | 16<br>and<br>under<br>18<br>cents. | 18<br>and<br>under<br>20<br>cents. | 20<br>and<br>under<br>25<br>cents. | 25<br>and<br>under<br>30<br>cents. | 30<br>and<br>under<br>40<br>cents. | 40<br>and<br>under<br>50<br>cents. | 50<br>and<br>under<br>60<br>cents. | 60<br>and<br>under<br>70<br>cents. | 70<br>cents<br>and<br>over. |             |
|                                               |                                    |                                    |                                    | 19                                 | 75                                 |                                    |                                    |                                    |                                    |                                    |                             | 1           |
|                                               |                                    |                                    |                                    |                                    | 19                                 | 57                                 |                                    |                                    |                                    |                                    |                             | 2           |
|                                               |                                    |                                    |                                    |                                    | 19                                 | 65                                 |                                    |                                    |                                    |                                    |                             | 3           |
|                                               |                                    |                                    |                                    |                                    |                                    | 35                                 | 54                                 |                                    |                                    |                                    |                             | 4           |
|                                               |                                    |                                    |                                    |                                    | 1                                  | 37                                 | 55                                 |                                    |                                    |                                    |                             | 5           |
|                                               |                                    |                                    | 2                                  | 4                                  | 2                                  | 16                                 | 73                                 |                                    |                                    |                                    |                             | 6           |
|                                               |                                    |                                    |                                    |                                    | 81                                 | 38                                 | 91                                 |                                    |                                    |                                    |                             | 7           |
|                                               |                                    |                                    |                                    |                                    | 88                                 | 30                                 | 83                                 |                                    |                                    |                                    |                             | 8           |
|                                               |                                    |                                    | 10                                 |                                    | 155                                | 20                                 | 42                                 |                                    |                                    |                                    |                             | 9           |
|                                               |                                    |                                    |                                    |                                    | 9                                  | 4                                  |                                    |                                    |                                    |                                    |                             | 10          |
|                                               |                                    |                                    |                                    |                                    | 17                                 |                                    |                                    |                                    |                                    |                                    |                             | 11          |
|                                               |                                    |                                    |                                    |                                    | 15                                 |                                    |                                    |                                    |                                    |                                    |                             | 12          |
|                                               | 7                                  |                                    |                                    |                                    | 6                                  | 5                                  |                                    |                                    |                                    |                                    |                             | 13          |
|                                               |                                    |                                    | 2                                  | 3                                  | 6                                  |                                    |                                    |                                    |                                    |                                    |                             | 14          |
|                                               |                                    |                                    |                                    |                                    | 3                                  | 33                                 | 85                                 | 97                                 | 3                                  | 3                                  |                             | 15          |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  | 69                                 | 180                                | 7                                  | 4                                  |                             | 16          |
|                                               |                                    |                                    |                                    |                                    |                                    | 2                                  | 90                                 | 180                                | 7                                  | 4                                  |                             | 17          |
|                                               |                                    |                                    |                                    |                                    |                                    | 6                                  | 114                                | 71                                 | 98                                 | 5                                  |                             | 18          |
|                                               |                                    |                                    |                                    |                                    |                                    | 1                                  | 28                                 | 248                                | 15                                 | 4                                  |                             | 19          |
|                                               |                                    |                                    |                                    |                                    | 6                                  |                                    | 181                                | 273                                | 19                                 | 5                                  |                             | 20          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 61                                 | 371                                | 43                                 | 10                                 | 1                           | 21          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 31                                 | 370                                | 82                                 | 4                                  |                             | 22          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 7                                  | 5                                  |                             | 23          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 6                                  | 9                                  | 1                           | 24          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 3                                  | 6                                  |                             | 25          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 1                                  | 2                                  | 6                                  | 3                           | 26          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 9                                  | 8                                  | 6                                  | 3                           | 27          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 10                                 | 8                                  | 3                                  | 1                           | 28          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 2                                  | 9                                  | 7                                  |                             | 29          |
|                                               |                                    |                                    |                                    |                                    |                                    | 17                                 | 10                                 | 7                                  |                                    |                                    |                             | 30          |
|                                               |                                    |                                    |                                    |                                    |                                    | 18                                 | 6                                  | 15                                 |                                    |                                    |                             | 31          |
|                                               |                                    |                                    |                                    |                                    |                                    | 21                                 | 6                                  | 15                                 |                                    |                                    |                             | 32          |
|                                               |                                    |                                    |                                    | 4                                  |                                    | 16                                 | 7                                  | 3                                  |                                    |                                    |                             | 33          |
|                                               |                                    |                                    |                                    |                                    |                                    | 8                                  | 20                                 | 6                                  |                                    |                                    |                             | 34          |
|                                               |                                    |                                    |                                    |                                    |                                    | 5                                  | 18                                 | 5                                  |                                    |                                    |                             | 35          |
|                                               |                                    |                                    |                                    |                                    |                                    | 15                                 | 25                                 | 7                                  | 1                                  |                                    |                             | 36          |
|                                               |                                    |                                    |                                    | 1                                  |                                    | 9                                  | 5                                  | 26                                 |                                    |                                    |                             | 37          |
|                                               |                                    |                                    | 12                                 |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 38          |
|                                               |                                    |                                    | 20                                 |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 39          |
|                                               |                                    |                                    | 16                                 |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 40          |
|                                               |                                    |                                    |                                    | 17                                 |                                    |                                    |                                    |                                    |                                    |                                    |                             | 41          |
|                                               |                                    |                                    |                                    |                                    | 37                                 |                                    |                                    |                                    |                                    |                                    |                             | 42          |
|                                               |                                    |                                    |                                    |                                    | 25                                 | 16                                 |                                    |                                    |                                    |                                    |                             | 43          |
|                                               |                                    |                                    |                                    |                                    | 26                                 | 8                                  |                                    |                                    |                                    |                                    |                             | 44          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  |                                    |                                    |                                    |                             | 45          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 1                                  |                                    |                                    |                             | 46          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 47          |
| 17                                            | 76                                 | 8                                  |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 48          |
| 5                                             | 98                                 | 3                                  |                                    |                                    |                                    | 6                                  |                                    |                                    |                                    |                                    |                             | 49          |
|                                               |                                    |                                    |                                    |                                    |                                    | 6                                  |                                    |                                    |                                    |                                    |                             | 50          |
| 5                                             | 106                                | 3                                  |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 51          |
|                                               | 88                                 | 1                                  | 34                                 | 4                                  |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
| 4                                             | 6                                  | 1                                  | 104                                | 3                                  | 2                                  |                                    |                                    |                                    |                                    |                                    |                             |             |

TABLE S.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, YEARS, 1910 TO 1915—

| Line No. | Occupation, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                       |                  |     |                       |    |                       |     |
|----------|-----------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|-----------------------|------------------|-----|-----------------------|----|-----------------------|-----|
|          |                                   |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56. | 56 and under 60. | 60  | Over 60 and under 72. | 72 | Over 72 and under 84. | 84  |
| 1        | Assorters, female—Con.            | 1913  | 171                  | 53.7                              | \$0.163                         | \$8.75                             | 42                                             | 6                     | 123              |     |                       |    |                       |     |
| 2        | 6 plants.....                     | 1914  | 172                  | 53.3                              | .153                            | 8.25                               | 47                                             | 6                     | 119              |     |                       |    |                       |     |
| 3        |                                   | 1915  | 208                  | 55.4                              | .162                            | 8.98                               | 48                                             | 6                     | 154              |     |                       |    |                       |     |
| 4        | Laborers:                         | 1910  | 191                  | 60.6                              | .165                            | 9.97                               |                                                |                       | 101              | 46  | 44                    |    |                       |     |
| 5        | 4 plants.....                     | 1911  | 201                  | 60.4                              | .163                            | 9.84                               |                                                | 9                     | 79               | 73  | 38                    | 2  |                       |     |
| 6        |                                   | 1911  | 238                  | 61.0                              | .164                            | 10.01                              |                                                | 9                     | 79               | 90  | 58                    | 2  |                       |     |
| 7        | 5 plants.....                     | 1912  | 239                  | 61.3                              | .169                            | 10.37                              |                                                | 1                     | 83               | 97  | 56                    | 1  | 1                     |     |
| 8        |                                   | 1912  | 276                  | 61.6                              | .167                            | 10.32                              |                                                |                       | 83               | 118 | 70                    | 1  | 3                     | 1   |
| 9        | 6 plants.....                     | 1913  | 322                  | 61.1                              | .190                            | 11.63                              |                                                |                       | 107              | 108 | 103                   | 1  | 3                     |     |
| 10       |                                   | 1913  | 575                  | 61.6                              | .189                            | 11.64                              |                                                |                       | 136              | 105 | 333                   | 1  |                       |     |
| 11       | 9 plants.....                     | 1914  | 469                  | 62.4                              | .189                            | 11.78                              |                                                |                       | 58               | 73  | 33                    |    |                       | 2   |
| 12       |                                   | 1915  | 444                  | 61.6                              | .190                            | 11.72                              |                                                |                       | 145              | 72  | 22                    |    | 1                     |     |
| 13       | Unclassified—productive:          | 1914  | 1,271                | 57.3                              | .247                            | 13.85                              | 311                                            | 69                    | 261              | 283 | 264                   | 60 | 12                    | 11  |
| 14       | 9 plants.....                     | 1915  | 1,279                | 58.5                              | .253                            | 14.50                              | 249                                            | 113                   | 220              | 322 | 299                   | 33 | 20                    | 23  |
| 15       | Unclassified—nonproductive:       | 1914  | 450                  | 64.6                              | .222                            | 14.52                              | 2                                              | 4                     | 106              | 173 | 99                    | 35 | 15                    | 136 |
| 16       | 9 plants.....                     | 1915  | 400                  | 65.4                              | .224                            | 14.53                              | 2                                              | 6                     | 88               | 113 | 94                    | 43 | 20                    | 134 |

<sup>1</sup> Including 1 employee whose full-time hours per week were 87.

AND FULL-TIME WEEKLY EARNINGS, IN THE UNITED STATES, BY  
TIN-PLATE MILLS—Concluded.

| Employees whose rates of wages per hour were— |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | Line<br>No. |
|-----------------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|-----------------------------|-------------|
| 10<br>and<br>under<br>12<br>cents.            | 12<br>and<br>under<br>14<br>cents. | 14<br>and<br>under<br>16<br>cents. | 16<br>and<br>under<br>18<br>cents. | 18<br>and<br>under<br>20<br>cents. | 20<br>and<br>under<br>25<br>cents. | 25<br>and<br>under<br>30<br>cents. | 30<br>and<br>under<br>40<br>cents. | 40<br>and<br>under<br>50<br>cents. | 50<br>and<br>under<br>60<br>cents. | 60<br>and<br>under<br>70<br>cents. | 70<br>cents<br>and<br>over. |             |
| .....                                         | 4                                  | 7                                  | 155                                | 3                                  | 2                                  | .....                              | .....                              | .....                              | .....                              | .....                              | .....                       | 1           |
| 6                                             | 41                                 | 5                                  | 119                                | .....                              | 1                                  | .....                              | .....                              | .....                              | .....                              | .....                              | .....                       | 2           |
| .....                                         | 8                                  | 8                                  | 186                                | .....                              | 5                                  | .....                              | 1                                  | .....                              | .....                              | .....                              | .....                       | 3           |
| .....                                         | .....                              | 52                                 | 139                                | .....                              | .....                              | .....                              | .....                              | .....                              | .....                              | .....                              | .....                       | 4           |
| .....                                         | 6                                  | 62                                 | 133                                | .....                              | .....                              | .....                              | .....                              | .....                              | .....                              | .....                              | .....                       | 5           |
| .....                                         | 6                                  | 62                                 | 170                                | .....                              | .....                              | .....                              | .....                              | .....                              | .....                              | .....                              | .....                       | 6           |
| .....                                         | .....                              | 10                                 | 229                                | .....                              | .....                              | .....                              | .....                              | .....                              | .....                              | .....                              | .....                       | 7           |
| .....                                         | .....                              | 25                                 | 251                                | .....                              | .....                              | .....                              | .....                              | .....                              | .....                              | .....                              | .....                       | 8           |
| .....                                         | .....                              | 8                                  | 42                                 | 272                                | .....                              | .....                              | .....                              | .....                              | .....                              | .....                              | .....                       | 9           |
| .....                                         | .....                              | 2                                  | 34                                 | 530                                | 9                                  | .....                              | .....                              | .....                              | .....                              | .....                              | .....                       | 10          |
| .....                                         | .....                              | 4                                  | 35                                 | 425                                | 7                                  | .....                              | .....                              | .....                              | .....                              | .....                              | .....                       | 11          |
| .....                                         | .....                              | 2                                  | 12                                 | 408                                | 22                                 | .....                              | .....                              | .....                              | .....                              | .....                              | .....                       | 12          |
| .....                                         | .....                              | 66                                 | 159                                | 285                                | 328                                | 184                                | 186                                | 23                                 | 8                                  | 6                                  | 26                          | 13          |
| .....                                         | 1                                  | 44                                 | 138                                | 295                                | 292                                | 161                                | 224                                | 105                                | 7                                  | 8                                  | 4                           | 14          |
| .....                                         | .....                              | 6                                  | 24                                 | 169                                | 161                                | 36                                 | 46                                 | 7                                  | 1                                  | .....                              | .....                       | 15          |
| .....                                         | .....                              | 8                                  | 38                                 | 132                                | 128                                | 42                                 | 41                                 | 8                                  | 1                                  | .....                              | 2                           | 16          |

TABLE T.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER BY YEARS, 1913 TO 1915—

[The abbreviation "G. L. and M. W." stands for "Great Lakes and

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
|          | Rollers:                                    |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 1        | Pittsburgh—                                 | 1913  | 187                  | 42.7                              | \$1.197                         | \$51.07                            | 187                                            |                      |                 |    |                      |    |                      |    |
| 2        | 5 plants.....                               | 1914  | 187                  | 42.7                              | 1.092                           | 46.59                              | 187                                            |                      |                 |    |                      |    |                      |    |
| 3        |                                             | 1915  | 187                  | 42.7                              | 1.105                           | 47.14                              | 187                                            |                      |                 |    |                      |    |                      |    |
| 4        | G. L. and M. W.—                            | 1913  | 169                  | 42.7                              | 1.075                           | 45.86                              | 169                                            |                      |                 |    |                      |    |                      |    |
| 5        | 4 plants.....                               | 1914  | 147                  | 42.7                              | 1.135                           | 48.42                              | 147                                            |                      |                 |    |                      |    |                      |    |
| 6        | 5 plants.....                               | 1914  | 158                  | 42.7                              | 1.143                           | 48.79                              | 158                                            |                      |                 |    |                      |    |                      |    |
| 7        |                                             | 1915  | 162                  | 42.7                              | 1.106                           | 47.21                              | 162                                            |                      |                 |    |                      |    |                      |    |
| 8        | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 9        | 9 plants.....                               | 1913  | 356                  | 42.7                              | 1.139                           | 48.59                              | 356                                            |                      |                 |    |                      |    |                      |    |
|          |                                             | 1914  | 334                  | 42.7                              | 1.111                           | 47.39                              | 334                                            |                      |                 |    |                      |    |                      |    |
| 10       | 10 plants.....                              | 1914  | 345                  | 42.7                              | 1.115                           | 47.59                              | 345                                            |                      |                 |    |                      |    |                      |    |
| 11       |                                             | 1915  | 349                  | 42.7                              | 1.106                           | 47.17                              | 349                                            |                      |                 |    |                      |    |                      |    |
|          | Roughers:                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 12       | Pittsburgh—                                 | 1913  | 211                  | 42.7                              | .558                            | 23.82                              | 211                                            |                      |                 |    |                      |    |                      |    |
| 13       | 6 plants.....                               | 1914  | 207                  | 42.7                              | .567                            | 24.19                              | 207                                            |                      |                 |    |                      |    |                      |    |
| 14       |                                             | 1915  | 203                  | 42.7                              | .563                            | 24.03                              | 203                                            |                      |                 |    |                      |    |                      |    |
| 15       | G. L. and M. W.—                            | 1913  | 169                  | 42.7                              | .501                            | 21.36                              | 169                                            |                      |                 |    |                      |    |                      |    |
| 16       | 4 plants.....                               | 1914  | 149                  | 42.7                              | .544                            | 23.21                              | 149                                            |                      |                 |    |                      |    |                      |    |
| 17       | 5 plants.....                               | 1914  | 160                  | 42.7                              | .550                            | 23.46                              | 160                                            |                      |                 |    |                      |    |                      |    |
| 18       |                                             | 1915  | 163                  | 42.7                              | .560                            | 23.88                              | 163                                            |                      |                 |    |                      |    |                      |    |
| 19       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 20       | 10 plants.....                              | 1913  | 380                  | 42.7                              | .533                            | 22.73                              | 380                                            |                      |                 |    |                      |    |                      |    |
|          |                                             | 1914  | 356                  | 42.7                              | .557                            | 23.78                              | 356                                            |                      |                 |    |                      |    |                      |    |
| 21       | 11 plants.....                              | 1914  | 367                  | 42.7                              | .560                            | 23.87                              | 367                                            |                      |                 |    |                      |    |                      |    |
| 22       |                                             | 1915  | 366                  | 42.7                              | .562                            | 23.96                              | 366                                            |                      |                 |    |                      |    |                      |    |
|          | Catchers:                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 23       | Pittsburgh—                                 | 1913  | 197                  | 42.7                              | .466                            | 19.89                              | 197                                            |                      |                 |    |                      |    |                      |    |
| 24       | 6 plants.....                               | 1914  | 191                  | 42.7                              | .448                            | 19.11                              | 191                                            |                      |                 |    |                      |    |                      |    |
| 25       |                                             | 1915  | 196                  | 42.7                              | .453                            | 19.33                              | 196                                            |                      |                 |    |                      |    |                      |    |
| 26       | G. L. and M. W.—                            | 1913  | 157                  | 42.7                              | .458                            | 19.55                              | 157                                            |                      |                 |    |                      |    |                      |    |
| 27       | 4 plants.....                               | 1914  | 144                  | 42.7                              | .481                            | 20.54                              | 144                                            |                      |                 |    |                      |    |                      |    |
| 28       | 5 plants.....                               | 1914  | 156                  | 42.7                              | .492                            | 20.99                              | 156                                            |                      |                 |    |                      |    |                      |    |
| 29       |                                             | 1915  | 165                  | 42.7                              | .532                            | 22.70                              | 165                                            |                      |                 |    |                      |    |                      |    |
| 30       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 31       | 10 plants.....                              | 1913  | 354                  | 42.7                              | .463                            | 19.74                              | 354                                            |                      |                 |    |                      |    |                      |    |
|          |                                             | 1914  | 335                  | 42.7                              | .462                            | 19.73                              | 335                                            |                      |                 |    |                      |    |                      |    |
| 32       | 11 plants.....                              | 1914  | 347                  | 42.7                              | .468                            | 19.95                              | 347                                            |                      |                 |    |                      |    |                      |    |
| 33       |                                             | 1915  | 361                  | 42.7                              | .489                            | 20.87                              | 361                                            |                      |                 |    |                      |    |                      |    |
|          | Screw boys:                                 |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 34       | Pittsburgh—                                 | 1913  | 213                  | 42.7                              | .379                            | 16.17                              | 213                                            |                      |                 |    |                      |    |                      |    |
| 35       | 6 plants.....                               | 1914  | 210                  | 42.7                              | .390                            | 16.64                              | 210                                            |                      |                 |    |                      |    |                      |    |
| 36       |                                             | 1915  | 207                  | 42.7                              | .397                            | 16.95                              | 207                                            |                      |                 |    |                      |    |                      |    |
| 37       | G. L. and M. W.—                            | 1913  | 174                  | 42.7                              | .351                            | 14.99                              | 174                                            |                      |                 |    |                      |    |                      |    |
| 38       | 4 plants.....                               | 1914  | 162                  | 42.7                              | .376                            | 16.03                              | 162                                            |                      |                 |    |                      |    |                      |    |
| 39       | 5 plants.....                               | 1914  | 174                  | 42.7                              | .379                            | 16.18                              | 174                                            |                      |                 |    |                      |    |                      |    |
| 40       |                                             | 1915  | 165                  | 42.7                              | .378                            | 16.14                              | 165                                            |                      |                 |    |                      |    |                      |    |

# HOUR, AND FULL-TIME WEEKLY EARNINGS IN EACH DISTRICT, TIN-PLATE MILLS.

Middle West." The figures for each group of years are for identical plants.]

| Employees whose rates of wages per hour were— |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | Line<br>No. |
|-----------------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|-----------------------------|-------------|
| 10<br>and<br>under<br>12<br>cents.            | 12<br>and<br>under<br>14<br>cents. | 14<br>and<br>under<br>16<br>cents. | 16<br>and<br>under<br>18<br>cents. | 18<br>and<br>under<br>20<br>cents. | 20<br>and<br>under<br>25<br>cents. | 25<br>and<br>under<br>30<br>cents. | 30<br>and<br>under<br>40<br>cents. | 40<br>and<br>under<br>50<br>cents. | 50<br>and<br>under<br>60<br>cents. | 60<br>and<br>under<br>70<br>cents. | 70<br>cents<br>and<br>over. |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 187                         | 1           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  |                                    | 186                         | 2           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 185                         | 3           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 168                         | 4           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 147                         | 5           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 158                         | 6           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 161                         | 7           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 355                         | 8           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 333                         | 9           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  |                                    | 344                         | 10          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 3                                  | 346                         | 11          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 68                                 | 61                                 | 63                                 | 18                          | 12          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 41                                 | 92                                 | 63                                 | 11                          | 13          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 35                                 | 109                                | 49                                 | 9                           | 14          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 86                                 | 66                                 | 12                                 | 1                           | 15          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 39                                 | 78                                 | 25                                 | 6                           | 16          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 39                                 | 80                                 | 34                                 | 6                           | 17          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 36                                 | 78                                 | 47                                 | 2                           | 18          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 5                                  | 154                                | 127                                | 75                                 | 19                          | 19          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 80                                 | 170                                | 88                                 | 17                          | 20          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 80                                 | 172                                | 97                                 | 17                          | 21          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 71                                 | 187                                | 96                                 | 11                          | 22          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 3                                  | 50                                 | 69                                 | 60                                 | 13                          | 23          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 3                                  | 62                                 | 88                                 | 18                                 | 17                          | 24          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 41                                 | 109                                | 40                                 | 6                           | 25          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 29                                 | 91                                 | 31                                 | 4                           | 26          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 28                                 | 51                                 | 42                                 | 14                          | 27          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 28                                 | 51                                 | 46                                 | 22                          | 28          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 5                                  | 54                                 | 75                                 | 30                          | 29          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 3                                  | 79                                 | 160                                | 91                                 | 17                          | 30          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 7                                  | 90                                 | 139                                | 60                                 | 31                          | 31          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 7                                  | 90                                 | 139                                | 64                                 | 39                          | 32          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 46                                 | 163                                | 115                                | 36                          | 33          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 33                                 | 91                                 | 82                                 | 6                           | 34          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 130                                | 75                                 | 4                           | 35          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 3                                  |                                    | 112                                | 84                                 | 8                           | 36          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 17                                 | 132                                | 22                                 | 1                           | 37          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 5                                  | 114                                | 38                                 | 4                           | 38          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 5                                  | 117                                | 47                                 | 4                           | 39          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 8                                  | 102                                | 55                                 |                             | 40          |

TABLE T.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER  
BY YEARS, 1913 TO 1915—

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 |
|          | <b>Screw boys—Concld.</b>                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 1        | Total—                                      | 1913  | 387                  | 42.7                              | \$0.366                         | \$15.64                            | 387                                            |                      |                 |    |                      |    |                      |
| 2        | 10 plants.....                              | 1914  | 372                  | 42.7                              | .384                            | 16.37                              | 372                                            |                      |                 |    |                      |    |                      |
| 3        | 11 plants.....                              | 1914  | 384                  | 42.7                              | .385                            | 16.43                              | 384                                            |                      |                 |    |                      |    |                      |
| 4        |                                             | 1915  | 372                  | 42.7                              | .389                            | 16.59                              | 372                                            |                      |                 |    |                      |    |                      |
|          | <b>Doublers:</b>                            |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 5        | Pittsburgh—                                 | 1913  | 187                  | 42.7                              | .765                            | 32.63                              | 187                                            |                      |                 |    |                      |    |                      |
| 6        | 6 plants.....                               | 1914  | 180                  | 42.7                              | .716                            | 30.55                              | 180                                            |                      |                 |    |                      |    |                      |
| 7        | 5 plants.....                               | 1914  | 162                  | 42.7                              | .711                            | 30.35                              | 162                                            |                      |                 |    |                      |    |                      |
| 8        |                                             | 1915  | 159                  | 42.7                              | .715                            | 30.53                              | 159                                            |                      |                 |    |                      |    |                      |
| 9        | G. L. and M. W.—                            | 1913  | 154                  | 42.7                              | .710                            | 30.31                              | 154                                            |                      |                 |    |                      |    |                      |
| 10       | 4 plants.....                               | 1914  | 144                  | 42.7                              | .756                            | 32.27                              | 144                                            |                      |                 |    |                      |    |                      |
| 11       | 5 plants.....                               | 1914  | 154                  | 42.7                              | .758                            | 32.35                              | 154                                            |                      |                 |    |                      |    |                      |
| 12       |                                             | 1915  | 163                  | 42.7                              | .720                            | 30.72                              | 163                                            |                      |                 |    |                      |    |                      |
| 13       | Total—                                      | 1913  | 341                  | 42.7                              | .740                            | 31.58                              | 341                                            |                      |                 |    |                      |    |                      |
| 14       | 10 plants.....                              | 1914  | 324                  | 42.7                              | .734                            | 31.32                              | 324                                            |                      |                 |    |                      |    |                      |
| 15       | 10 plants.....                              | 1914  | 316                  | 42.7                              | .734                            | 31.33                              | 316                                            |                      |                 |    |                      |    |                      |
| 16       |                                             | 1915  | 322                  | 42.7                              | .718                            | 30.63                              | 322                                            |                      |                 |    |                      |    |                      |
|          | <b>Doublers, level-handed:</b>              |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 17       | Pittsburgh—                                 | 1913  | 46                   | 42.7                              | .567                            | 24.20                              | 46                                             |                      |                 |    |                      |    |                      |
| 18       | 4 plants.....                               | 1914  | 48                   | 42.7                              | .564                            | 24.06                              | 48                                             |                      |                 |    |                      |    |                      |
| 19       | 5 plants.....                               | 1914  | 54                   | 42.7                              | .559                            | 23.84                              | 54                                             |                      |                 |    |                      |    |                      |
| 20       |                                             | 1915  | 62                   | 42.7                              | .561                            | 23.92                              | 62                                             |                      |                 |    |                      |    |                      |
| 21       | Total—                                      | 1913  | 46                   | 42.7                              | .567                            | 24.20                              | 46                                             |                      |                 |    |                      |    |                      |
| 22       | 4 plants.....                               | 1914  | 48                   | 42.7                              | .564                            | 24.06                              | 48                                             |                      |                 |    |                      |    |                      |
| 23       | 5 plants.....                               | 1914  | 54                   | 42.7                              | .559                            | 23.84                              | 54                                             |                      |                 |    |                      |    |                      |
| 24       |                                             | 1915  | 62                   | 42.7                              | .561                            | 23.92                              | 62                                             |                      |                 |    |                      |    |                      |
|          | <b>Doublers' helpers:</b>                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 25       | Pittsburgh—                                 | 1913  | 190                  | 42.7                              | .402                            | 17.16                              | 190                                            |                      |                 |    |                      |    |                      |
| 26       | 6 plants.....                               | 1914  | 183                  | 42.7                              | .424                            | 18.07                              | 183                                            |                      |                 |    |                      |    |                      |
| 27       | 5 plants.....                               | 1914  | 165                  | 42.7                              | .414                            | 17.68                              | 165                                            |                      |                 |    |                      |    |                      |
| 28       |                                             | 1915  | 159                  | 42.7                              | .419                            | 17.88                              | 159                                            |                      |                 |    |                      |    |                      |
| 29       | G. L. and M. W.—                            | 1913  | 154                  | 42.7                              | .312                            | 13.31                              | 154                                            |                      |                 |    |                      |    |                      |
| 30       | 4 plants.....                               | 1914  | 147                  | 42.7                              | .341                            | 14.53                              | 147                                            |                      |                 |    |                      |    |                      |
| 31       | 5 plants.....                               | 1914  | 157                  | 42.7                              | .344                            | 14.68                              | 157                                            |                      |                 |    |                      |    |                      |
| 32       |                                             | 1915  | 165                  | 42.7                              | .386                            | 16.49                              | 165                                            |                      |                 |    |                      |    |                      |
| 33       | Total—                                      | 1913  | 344                  | 42.7                              | .362                            | 15.43                              | 344                                            |                      |                 |    |                      |    |                      |
| 34       | 10 plants.....                              | 1914  | 330                  | 42.7                              | .387                            | 16.49                              | 330                                            |                      |                 |    |                      |    |                      |
| 35       | 10 plants.....                              | 1914  | 322                  | 42.7                              | .380                            | 16.21                              | 322                                            |                      |                 |    |                      |    |                      |
| 36       |                                             | 1915  | 324                  | 42.7                              | .402                            | 17.17                              | 324                                            |                      |                 |    |                      |    |                      |
|          | <b>Heaters:</b>                             |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |
| 37       | Pittsburgh—                                 | 1913  | 120                  | 42.7                              | .765                            | 32.65                              | 120                                            |                      |                 |    |                      |    |                      |
| 38       | 6 plants.....                               | 1914  | 103                  | 42.7                              | .755                            | 32.20                              | 103                                            |                      |                 |    |                      |    |                      |
| 39       | 5 plants.....                               | 1914  | 85                   | 42.7                              | .740                            | 31.55                              | 85                                             |                      |                 |    |                      |    |                      |
| 40       |                                             | 1915  | 106                  | 42.7                              | .745                            | 31.80                              | 106                                            |                      |                 |    |                      |    |                      |

HOURLY, AND FULL-TIME WEEKLY EARNINGS IN EACH DISTRICT,  
TIN-PLATE MILLS—Continued.

| Employees whose rates of wages per hour were— |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | Lien<br>No. |
|-----------------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|-----------------------------|-------------|
| 10<br>and<br>under<br>12<br>cents.            | 12<br>and<br>under<br>14<br>cents. | 14<br>and<br>under<br>16<br>cents. | 16<br>and<br>under<br>18<br>cents. | 18<br>and<br>under<br>20<br>cents. | 20<br>and<br>under<br>25<br>cents. | 25<br>and<br>under<br>30<br>cents. | 30<br>and<br>under<br>40<br>cents. | 40<br>and<br>under<br>50<br>cents. | 50<br>and<br>under<br>60<br>cents. | 60<br>and<br>under<br>70<br>cents. | 70<br>cents<br>and<br>over. |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                    |                                    |                                    |                                    | 3                                  | 50                                 | 223                                | 104                                | 7                                  |                                    |                             | 1           |
|                                               |                                    |                                    |                                    |                                    | 1                                  | 5                                  | 244                                | 113                                | 8                                  | 1                                  |                             | 2           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                    |                                    |                                    |                                    | 1                                  | 5                                  | 247                                | 122                                | 8                                  | 1                                  |                             | 3           |
|                                               |                                    |                                    |                                    |                                    |                                    | 11                                 | 214                                | 139                                | 8                                  |                                    |                             | 4           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 20                                 | 45                                 | 121                         | 5           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 17                                 | 74                                 | 89                          | 6           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 17                                 | 73                                 | 72                          | 7           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 16                                 | 58                                 | 85                          | 8           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 25                                 | 50                                 | 75                          | 9           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 13                                 | 32                                 | 95                          | 10          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 13                                 | 33                                 | 104                         | 11          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 10                                 | 56                                 | 96                          | 12          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 5                                  | 45                                 | 95                                 | 196                         | 13          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 30                                 | 106                                | 184                         | 14          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 30                                 | 106                                | 176                         | 15          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 26                                 | 114                                | 181                         | 16          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 8                                  | 24                                 | 10                                 | 4                           | 17          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 6                                  | 28                                 | 12                                 | 2                           | 18          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 8                                  | 32                                 | 12                                 | 2                           | 19          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 18                                 | 26                                 | 12                                 | 6                           | 20          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 8                                  | 24                                 | 10                                 | 4                           | 21          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 6                                  | 28                                 | 12                                 | 2                           | 22          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 8                                  | 32                                 | 12                                 | 2                           | 23          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 18                                 | 26                                 | 12                                 | 6                           | 24          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                    |                                    |                                    |                                    |                                    | 3                                  | 114                                | 57                                 | 15                                 | 1                                  |                             | 25          |
|                                               |                                    |                                    |                                    |                                    |                                    | 1                                  | 60                                 | 101                                | 21                                 |                                    |                             | 26          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                    |                                    |                                    |                                    |                                    | 1                                  | 60                                 | 96                                 | 8                                  |                                    |                             | 27          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 57                                 | 94                                 | 4                                  | 3                                  | 1                           | 28          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                    |                                    |                                    |                                    | 4                                  | 46                                 | 101                                | 3                                  |                                    |                                    |                             | 29          |
|                                               |                                    |                                    |                                    |                                    | 4                                  | 21                                 | 104                                | 18                                 |                                    |                                    |                             | 30          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                    |                                    |                                    |                                    | 4                                  | 21                                 | 110                                | 22                                 |                                    |                                    |                             | 31          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 99                                 | 64                                 | 2                                  |                                    |                             | 32          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                    |                                    |                                    |                                    | 4                                  | 49                                 | 215                                | 60                                 | 15                                 | 1                                  |                             | 33          |
|                                               |                                    |                                    |                                    |                                    | 4                                  | 22                                 | 164                                | 119                                | 21                                 |                                    |                             | 34          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                    |                                    |                                    |                                    | 4                                  | 22                                 | 170                                | 118                                | 8                                  |                                    |                             | 35          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 156                                | 158                                | 6                                  | 3                                  | 1                           | 36          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 37                                 | 82                          | 37          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 3                                  | 21                                 | 79                          | 38          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 3                                  | 21                                 | 61                          | 39          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 9                                  | 24                                 | 73                          | 40          |

TABLE T.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER BY YEARS, 1913 TO 1915—

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Heaters—Concluded.                          |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 2        | G. L. and M. W.—                            | 1913  | 36                   | 42.7                              | \$0.698                         | \$29.79                            | 36                                             |                      |                 |    |                      |    |                      |    |
| 3        | 3 plants.....                               | 1914  | 39                   | 42.7                              | .747                            | 31.85                              | 39                                             |                      |                 |    |                      |    |                      |    |
| 4        | 4 plants.....                               | 1914  | 51                   | 42.7                              | .764                            | 32.59                              | 51                                             |                      |                 |    |                      |    |                      |    |
| 5        |                                             | 1915  | 105                  | 42.7                              | .705                            | 30.10                              | 105                                            |                      |                 |    |                      |    |                      |    |
| 6        | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 7        | 9 plants.....                               | 1913  | 156                  | 42.7                              | .750                            | 31.99                              | 156                                            |                      |                 |    |                      |    |                      |    |
| 8        |                                             | 1914  | 142                  | 42.7                              | .752                            | 32.10                              | 142                                            |                      |                 |    |                      |    |                      |    |
| 9        | 9 plants.....                               | 1914  | 136                  | 42.7                              | .749                            | 31.94                              | 136                                            |                      |                 |    |                      |    |                      |    |
| 10       |                                             | 1915  | 211                  | 42.7                              | .725                            | 30.95                              | 211                                            |                      |                 |    |                      |    |                      |    |
| 11       | Heaters, level-handed:                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 12       | Pittsburgh—                                 | 1913  | 186                  | 42.7                              | .651                            | 27.75                              | 186                                            |                      |                 |    |                      |    |                      |    |
| 13       | 4 plants.....                               | 1914  | 184                  | 42.7                              | .638                            | 27.21                              | 184                                            |                      |                 |    |                      |    |                      |    |
| 14       | 5 plants.....                               | 1914  | 212                  | 42.7                              | .628                            | 26.78                              | 212                                            |                      |                 |    |                      |    |                      |    |
| 15       |                                             | 1915  | 174                  | 42.7                              | .626                            | 26.71                              | 174                                            |                      |                 |    |                      |    |                      |    |
| 16       | G. L. and M. W.—                            | 1913  | 228                  | 42.7                              | .550                            | 23.45                              | 228                                            |                      |                 |    |                      |    |                      |    |
| 17       | 2 plants.....                               | 1914  | 246                  | 42.7                              | .610                            | 26.02                              | 246                                            |                      |                 |    |                      |    |                      |    |
| 18       | 1 plant.....                                | 1914  | 120                  | 42.7                              | .596                            | 25.42                              | 120                                            |                      |                 |    |                      |    |                      |    |
| 19       |                                             | 1915  | 120                  | 42.7                              | .590                            | 25.17                              | 120                                            |                      |                 |    |                      |    |                      |    |
| 20       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 21       | 6 plants.....                               | 1913  | 414                  | 42.7                              | .595                            | 25.38                              | 414                                            |                      |                 |    |                      |    |                      |    |
| 22       |                                             | 1914  | 430                  | 42.7                              | .622                            | 26.53                              | 430                                            |                      |                 |    |                      |    |                      |    |
| 23       | 6 plants.....                               | 1914  | 332                  | 42.7                              | .616                            | 26.29                              | 332                                            |                      |                 |    |                      |    |                      |    |
| 24       |                                             | 1915  | 294                  | 42.7                              | .611                            | 26.08                              | 294                                            |                      |                 |    |                      |    |                      |    |
| 25       | Heaters' helpers:                           |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 26       | Pittsburgh—                                 | 1913  | 120                  | 42.7                              | .440                            | 18.79                              | 120                                            |                      |                 |    |                      |    |                      |    |
| 27       | 6 plants.....                               | 1914  | 103                  | 42.7                              | .492                            | 20.98                              | 103                                            |                      |                 |    |                      |    |                      |    |
| 28       | 5 plants.....                               | 1914  | 85                   | 42.7                              | .479                            | 20.44                              | 85                                             |                      |                 |    |                      |    |                      |    |
| 29       |                                             | 1915  | 106                  | 42.7                              | .477                            | 20.35                              | 106                                            |                      |                 |    |                      |    |                      |    |
| 30       | G. L. and M. W.—                            | 1913  | 27                   | 42.7                              | .386                            | 16.48                              | 27                                             |                      |                 |    |                      |    |                      |    |
| 31       | 2 plants.....                               | 1914  | 24                   | 42.7                              | .411                            | 17.52                              | 24                                             |                      |                 |    |                      |    |                      |    |
| 32       | 3 plants.....                               | 1914  | 36                   | 42.7                              | .411                            | 17.51                              | 36                                             |                      |                 |    |                      |    |                      |    |
| 33       |                                             | 1915  | 96                   | 42.7                              | .432                            | 18.42                              | 96                                             |                      |                 |    |                      |    |                      |    |
| 34       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 35       | 8 plants.....                               | 1913  | 147                  | 42.7                              | .430                            | 18.36                              | 147                                            |                      |                 |    |                      |    |                      |    |
| 36       |                                             | 1914  | 127                  | 42.7                              | .476                            | 20.32                              | 127                                            |                      |                 |    |                      |    |                      |    |
| 37       | 8 plants.....                               | 1914  | 121                  | 42.7                              | .459                            | 19.57                              | 121                                            |                      |                 |    |                      |    |                      |    |
| 38       |                                             | 1915  | 202                  | 42.7                              | .455                            | 19.43                              | 202                                            |                      |                 |    |                      |    |                      |    |
| 39       | Shearmen:                                   |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 40       | Pittsburgh—                                 | 1913  | 71                   | 55.4                              | .527                            | 29.20                              | 7                                              | 28                   | 20              | 16 |                      |    |                      |    |
| 41       | 6 plants.....                               | 1914  | 67                   | 56.1                              | .505                            | 28.35                              | 3                                              | 28                   | 20              | 16 |                      |    |                      |    |
| 42       | 5 plants.....                               | 1914  | 64                   | 56.8                              | .495                            | 28.22                              |                                                | 28                   | 20              | 16 |                      |    |                      |    |
| 43       |                                             | 1915  | 64                   | 56.8                              | .517                            | 29.46                              |                                                | 28                   | 20              | 16 |                      |    |                      |    |
| 44       | G. L. and M. W.—                            | 1913  | 55                   | 58.0                              | .431                            | 24.94                              |                                                | 7                    | 48              |    |                      |    |                      |    |
| 45       | 3 plants.....                               | 1914  | 49                   | 58.0                              | .459                            | 26.61                              |                                                | 7                    | 42              |    |                      |    |                      |    |
| 46       |                                             | 1915  | 48                   | 58.0                              | .511                            | 29.66                              |                                                | 6                    | 42              |    |                      |    |                      |    |
| 47       | Total—                                      |       |                      |                                   |                                 |                                    |                                                |                      |                 |    |                      |    |                      |    |
| 48       | 9 plants.....                               | 1913  | 126                  | 56.5                              | .485                            | 27.34                              | 7                                              | 35                   | 68              | 16 |                      |    |                      |    |
| 49       |                                             | 1914  | 116                  | 56.9                              | .486                            | 27.61                              | 3                                              | 35                   | 62              | 16 |                      |    |                      |    |
| 50       | 8 plants.....                               | 1914  | 113                  | 57.3                              | .479                            | 27.52                              |                                                | 35                   | 62              | 16 |                      |    |                      |    |
| 51       |                                             | 1915  | 112                  | 57.3                              | .514                            | 29.55                              |                                                | 34                   | 62              | 16 |                      |    |                      |    |



HOUR, AND FULL-TIME WEEKLY EARNINGS IN EACH DISTRICT,  
TIN-PLATE MILLS—Continued.

| Employees whose rates of wages per hour were— |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | Line<br>No. |
|-----------------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|-----------------------------|-------------|
| 10<br>and<br>under<br>12<br>cents.            | 12<br>and<br>under<br>14<br>cents. | 14<br>and<br>under<br>16<br>cents. | 16<br>and<br>under<br>18<br>cents. | 18<br>and<br>under<br>20<br>cents. | 20<br>and<br>under<br>25<br>cents. | 25<br>and<br>under<br>30<br>cents. | 30<br>and<br>under<br>40<br>cents. | 40<br>and<br>under<br>50<br>cents. | 50<br>and<br>under<br>60<br>cents. | 60<br>and<br>under<br>70<br>cents. | 70<br>cents<br>and<br>over. |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 8                                  | 13                                 | 15                          | 1           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 8                                  | 10                                 | 21                          | 2           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 8                                  | 10                                 | 33                          | 3           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 16                                 | 43                                 | 46                          | 4           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 9                                  | 50                                 | 97                          | 5           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 11                                 | 31                                 | 100                         | 6           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 11                                 | 31                                 | 94                          | 7           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 25                                 | 67                                 | 119                         | 8           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 44                                 | 100                                | 42                          | 9           |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 56                                 | 96                                 | 30                          | 10          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 76                                 | 102                                | 30                          | 11          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 8                                  | 66                                 | 68                                 | 32                          | 12          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 46                                 | 130                                | 48                                 | 2                           | 13          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 10                                 | 98                                 | 110                                | 26                          | 14          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 10                                 | 58                                 | 36                                 | 14                          | 15          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 66                                 | 48                                 | 2                           | 16          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 46                                 | 174                                | 148                                | 44                          | 17          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 12                                 | 154                                | 206                                | 56                          | 18          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 14                                 | 134                                | 138                                | 44                          | 19          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 12                                 | 132                                | 116                                | 34                          | 20          |
|                                               |                                    |                                    |                                    |                                    |                                    | 1                                  | 54                                 | 37                                 | 22                                 | 5                                  | 1                           | 21          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 7                                  | 59                                 | 26                                 | 11                                 |                             | 22          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 7                                  | 58                                 | 9                                  | 11                                 |                             | 23          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 11                                 | 67                                 | 22                                 | 4                                  | 2                           | 24          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 15                                 | 12                                 |                                    |                                    |                             | 25          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 12                                 | 10                                 | 2                                  |                                    |                             | 26          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 16                                 | 18                                 | 2                                  |                                    |                             | 27          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 24                                 | 65                                 | 7                                  |                                    |                             | 28          |
|                                               |                                    |                                    |                                    |                                    |                                    | 1                                  | 69                                 | 49                                 | 22                                 | 5                                  | 1                           | 29          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 19                                 | 69                                 | 28                                 | 11                                 |                             | 30          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 23                                 | 76                                 | 11                                 | 11                                 |                             | 31          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 35                                 | 132                                | 29                                 | 4                                  | 2                           | 32          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 7                                  | 22                                 | 25                                 | 15                                 | 2                           | 33          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 6                                  | 27                                 | 28                                 | 3                                  | 3                           | 34          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 6                                  | 27                                 | 28                                 | 2                                  | 1                           | 35          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 3                                  | 29                                 | 22                                 | 10                                 |                             | 36          |
|                                               |                                    |                                    |                                    |                                    |                                    | 6                                  | 16                                 | 20                                 | 13                                 |                                    |                             | 37          |
|                                               |                                    |                                    |                                    |                                    |                                    | 1                                  | 10                                 | 23                                 | 14                                 | 1                                  |                             | 38          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 9                                  | 13                                 | 16                                 | 10                                 |                             | 39          |
|                                               |                                    |                                    |                                    |                                    |                                    | 6                                  | 23                                 | 42                                 | 38                                 | 15                                 | 2                           | 40          |
|                                               |                                    |                                    |                                    |                                    |                                    | 1                                  | 16                                 | 50                                 | 42                                 | 4                                  | 3                           | 41          |
|                                               |                                    |                                    |                                    |                                    |                                    | 1                                  | 16                                 | 50                                 | 42                                 | 3                                  | 1                           | 42          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 12                                 | 42                                 | 38                                 | 20                                 |                             | 43          |

TABLE T.—FULL-TIME HOURS PER WEEK, RATES OF WAGES PER BY YEARS, 1913 TO 1915—

| Line No. | Occupation, district, and number of plants. | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |    |                      |    |                      |    |
|----------|---------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|----|----------------------|----|----------------------|----|
|          |                                             |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60 | Over 60 and under 72 | 72 | Over 72 and under 84 | 84 |
| 1        | Shearmen's helpers: Pittsburgh—             | 1913  | 36                   | 53.7                              | \$0.166                         | \$8.78                             | 8                                              | 22                   |                 | 6  |                      |    |                      |    |
| 2        | 3 plants.....                               | 1914  | 35                   | 53.8                              | .169                            | 8.97                               | 7                                              | 22                   |                 | 6  |                      |    |                      |    |
| 3        | 2 plants.....                               | 1914  | 28                   | 55.3                              | .147                            | 8.10                               |                                                | 22                   |                 | 6  |                      |    |                      |    |
| 4        | G. L. and M. W.—                            | 1915  | 27                   | 55.1                              | .148                            | 8.13                               |                                                | 22                   |                 | 5  |                      |    |                      |    |
| 5        | 1 plant.....                                | 1913  | 7                    | 66.5                              | .164                            | 10.93                              |                                                |                      |                 |    | 7                    |    |                      |    |
| 6        |                                             | 1914  | 7                    | 62.5                              | .161                            | 10.27                              |                                                |                      |                 |    | 7                    |    |                      |    |
| 7        |                                             | 1915  | 6                    | 62.5                              | .163                            | 10.21                              |                                                |                      |                 |    | 6                    |    |                      |    |
| 8        | Total—                                      | 1913  | 43                   | 55.8                              | .165                            | 9.13                               | 8                                              | 22                   |                 | 6  | 7                    |    |                      |    |
| 9        | 4 plants.....                               | 1914  | 42                   | 55.3                              | .168                            | 9.18                               | 7                                              | 22                   |                 | 6  | 7                    |    |                      |    |
| 10       | 3 plants.....                               | 1914  | 35                   | 56.7                              | .150                            | 8.53                               |                                                | 22                   |                 | 6  | 7                    |    |                      |    |
| 11       |                                             | 1915  | 33                   | 56.5                              | .150                            | 8.51                               |                                                | 22                   |                 | 5  | 6                    |    |                      |    |
| 12       | Openers, male: Pittsburgh—                  | 1913  | 119                  | 56.5                              | .319                            | 18.04                              |                                                | 46                   | 73              |    |                      |    |                      |    |
| 13       | 5 plants.....                               | 1911  | 119                  | 56.5                              | .301                            | 17.01                              |                                                | 46                   | 73              |    |                      |    |                      |    |
| 14       |                                             | 1915  | 152                  | 56.7                              | .258                            | 14.62                              |                                                | 56                   | 80              | 13 |                      |    |                      |    |
| 15       | G. L. and M. W.—                            | 1913  | 91                   | 57.5                              | .215                            | 12.36                              |                                                | 16                   | 75              |    |                      |    |                      |    |
| 16       | 2 plants.....                               | 1914  | 82                   | 57.4                              | .216                            | 12.42                              |                                                | 16                   | 61              |    |                      |    |                      |    |
| 17       |                                             | 1915  | 75                   | 58.1                              | .226                            | 13.14                              |                                                |                      | 75              |    |                      |    |                      |    |
| 18       | Total—                                      | 1913  | 210                  | 56.9                              | .274                            | 15.58                              |                                                | 62                   | 148             |    |                      |    |                      |    |
| 19       | 7 plants.....                               | 1914  | 201                  | 56.8                              | .266                            | 15.14                              |                                                | C2                   | 139             |    |                      |    |                      |    |
| 20       |                                             | 1915  | 227                  | 57.2                              | .247                            | 14.13                              |                                                | 56                   | 155             | 16 |                      |    |                      |    |
| 21       | Tinners: Pittsburgh—                        | 1913  | 301                  | 43.9                              | .444                            | 19.39                              | 276                                            |                      | 24              | 1  |                      |    |                      |    |
| 22       | 5 plants.....                               | 1914  | 296                  | 43.8                              | .452                            | 19.79                              | 273                                            |                      | 22              | 1  |                      |    |                      |    |
| 23       |                                             | 1915  | 293                  | 43.4                              | .457                            | 19.78                              | 279                                            |                      | 13              | 1  |                      |    |                      |    |
| 24       | G. L. and M. W.—                            | 1913  | 183                  | 43.0                              | .416                            | 17.93                              | 183                                            |                      |                 |    |                      |    |                      |    |
| 25       | 3 plants.....                               | 1914  | 190                  | 43.1                              | .426                            | 18.33                              | 190                                            |                      |                 |    |                      |    |                      |    |
| 26       |                                             | 1915  | 194                  | 43.1                              | .421                            | 18.16                              | 194                                            |                      |                 |    |                      |    |                      |    |
| 27       | Total—                                      | 1913  | 484                  | 43.6                              | .433                            | 18.84                              | 459                                            |                      | 24              | 1  |                      |    |                      |    |
| 28       | 8 plants.....                               | 1914  | 486                  | 43.5                              | .442                            | 19.22                              | 463                                            |                      | 22              | 1  |                      |    |                      |    |
| 29       |                                             | 1915  | 487                  | 43.3                              | .442                            | 19.13                              | 473                                            |                      | 13              | 1  |                      |    |                      |    |
| 30       | Redippers: Pittsburgh—                      | 1913  | 15                   | 57.7                              | .468                            | 27.01                              |                                                |                      | 14              | 1  |                      |    |                      |    |
| 31       | 1 plant.....                                | 1914  | 13                   | 57.7                              | .540                            | 31.19                              |                                                |                      | 12              | 1  |                      |    |                      |    |
| 32       |                                             | 1915  | 8                    | 57.8                              | .538                            | 31.06                              |                                                |                      | 7               | 1  |                      |    |                      |    |
| 33       | G. L. and M. W.—                            | 1913  | 11                   | 46.7                              | .630                            | 29.43                              | 11                                             |                      |                 |    |                      |    |                      |    |
| 34       | 2 plants.....                               | 1914  | 10                   | 46.9                              | .535                            | 25.12                              | 10                                             |                      |                 |    |                      |    |                      |    |
| 35       |                                             | 1915  | 11                   | 46.7                              | .582                            | 27.18                              | 11                                             |                      |                 |    |                      |    |                      |    |
| 36       | Total—                                      | 1913  | 26                   | 53.0                              | .536                            | 28.03                              | 11                                             |                      | 14              | 1  |                      |    |                      |    |
| 37       | 3 plants.....                               | 1914  | 23                   | 53.0                              | .538                            | 28.55                              | 10                                             |                      | 12              | 1  |                      |    |                      |    |
| 38       |                                             | 1915  | 19                   | 51.4                              | .563                            | 28.81                              | 11                                             |                      | 7               | 1  |                      |    |                      |    |
| 39       | Risers: Pittsburgh—                         | 1913  | 13                   | 42.7                              | .270                            | 11.53                              | 13                                             |                      |                 |    |                      |    |                      |    |
| 40       | 2 plants.....                               | 1914  | 31                   | 53.8                              | .264                            | 14.14                              | 8                                              |                      | 22              | 1  |                      |    |                      |    |
| 41       |                                             | 1915  | 24                   | 51.4                              | .290                            | 14.79                              | 10                                             |                      | 13              | 1  |                      |    |                      |    |
| 42       | G. L. and M. W.—                            | 1913  | 15                   | 46.7                              | .293                            | 13.70                              | 15                                             |                      |                 |    |                      |    |                      |    |
| 43       | 2 plants.....                               | 1914  | 17                   | 46.8                              | .275                            | 12.89                              | 17                                             |                      |                 |    |                      |    |                      |    |
| 44       |                                             | 1915  | 17                   | 46.7                              | .284                            | 13.27                              | 17                                             |                      |                 |    |                      |    |                      |    |
| 45       | Total—                                      | 1913  | 28                   | 44.8                              | .283                            | 12.69                              | 28                                             |                      |                 |    |                      |    |                      |    |
| 46       | 4 plants.....                               | 1914  | 48                   | 51.3                              | .268                            | 13.70                              | 25                                             |                      | 22              | 1  |                      |    |                      |    |
| 47       |                                             | 1915  | 41                   | 49.5                              | .288                            | 14.16                              | 27                                             |                      | 13              | 1  |                      |    |                      |    |

HOURLY AND FULL-TIME WEEKLY EARNINGS IN EACH DISTRICT,  
TIN-PLATE MILLS—Continued.

| Employees whose rates of wages per hour were— |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | Line<br>No. |
|-----------------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|-----------------------------|-------------|
| 10<br>and<br>under<br>12<br>cents.            | 12<br>and<br>under<br>14<br>cents. | 14<br>and<br>under<br>16<br>cents. | 16<br>and<br>under<br>18<br>cents. | 18<br>and<br>under<br>20<br>cents. | 20<br>and<br>under<br>25<br>cents. | 25<br>and<br>under<br>30<br>cents. | 30<br>and<br>under<br>40<br>cents. | 40<br>and<br>under<br>50<br>cents. | 50<br>and<br>under<br>60<br>cents. | 60<br>and<br>under<br>70<br>cents. | 70<br>cents<br>and<br>over. |             |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 1           |
|                                               | 3                                  | 25                                 |                                    |                                    | 7                                  | 1                                  |                                    |                                    |                                    |                                    |                             | 2           |
|                                               | 3                                  | 25                                 |                                    |                                    | 3                                  | 4                                  |                                    |                                    |                                    |                                    |                             | 3           |
|                                               | 3                                  | 25                                 |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 4           |
|                                               | 2                                  | 25                                 |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 5           |
|                                               |                                    |                                    |                                    | 7                                  |                                    |                                    |                                    |                                    |                                    |                                    |                             | 6           |
|                                               |                                    |                                    |                                    | 7                                  |                                    |                                    |                                    |                                    |                                    |                                    |                             | 7           |
|                                               |                                    |                                    |                                    | 6                                  |                                    |                                    |                                    |                                    |                                    |                                    |                             | 8           |
|                                               | 3                                  | 25                                 | 7                                  |                                    | 7                                  | 1                                  |                                    |                                    |                                    |                                    |                             | 9           |
|                                               | 3                                  | 25                                 | 7                                  |                                    | 3                                  | 4                                  |                                    |                                    |                                    |                                    |                             | 10          |
|                                               | 3                                  | 25                                 | 7                                  |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 11          |
|                                               | 2                                  | 25                                 | 6                                  |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 12          |
|                                               |                                    |                                    |                                    |                                    | 6                                  | 22                                 | 91                                 |                                    |                                    |                                    |                             | 13          |
|                                               |                                    |                                    |                                    |                                    | 6                                  | 30                                 | 83                                 |                                    |                                    |                                    |                             | 13          |
|                                               |                                    |                                    |                                    |                                    | 90                                 | 20                                 | 42                                 |                                    |                                    |                                    |                             | 14          |
|                                               |                                    |                                    |                                    |                                    | 75                                 | 16                                 |                                    |                                    |                                    |                                    |                             | 15          |
|                                               |                                    |                                    |                                    |                                    | 82                                 |                                    |                                    |                                    |                                    |                                    |                             | 16          |
|                                               |                                    |                                    | 10                                 |                                    | 65                                 |                                    |                                    |                                    |                                    |                                    |                             | 17          |
|                                               |                                    |                                    |                                    |                                    | 81                                 | 38                                 | 91                                 |                                    |                                    |                                    |                             | 18          |
|                                               |                                    |                                    |                                    |                                    | 88                                 | 30                                 | 83                                 |                                    |                                    |                                    |                             | 19          |
|                                               |                                    |                                    | 10                                 |                                    | 155                                | 20                                 | 42                                 |                                    |                                    |                                    |                             | 20          |
|                                               |                                    |                                    |                                    |                                    | 6                                  |                                    | 38                                 | 247                                | 10                                 |                                    |                             | 21          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 50                                 | 209                                | 23                                 |                                    |                             | 22          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 14                                 | 212                                | 67                                 | 8                                  | 1                           | 23          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 143                                | 26                                 | 9                                  | 5                                  |                             | 24          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 11                                 | 122                                | 15                                 | 2                                  |                             | 25          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 17                                 | 158                                | 15                                 | 4                                  |                             | 26          |
|                                               |                                    |                                    |                                    |                                    | 6                                  |                                    | 181                                | 273                                | 19                                 | 5                                  |                             | 27          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 61                                 | 371                                | 43                                 | 10                                 |                             | 28          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    | 31                                 | 370                                | 82                                 | 4                                  |                             | 29          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 8                                  | 6                                  | 1                                  |                             | 30          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 8                                  | 4                                  |                                    |                             | 31          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 4                                  | 3                                  |                             | 32          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 33          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 1                                  | 2                                  | 5                                  | 3                           | 34          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 4                                  | 3                                  |                             | 35          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 5                                  | 4                                  |                             | 36          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 37          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 9                                  | 8                                  | 6                                  | 3                           | 38          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 10                                 | 8                                  | 3                                  |                             | 39          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    | 2                                  | 9                                  | 7                                  |                             | 40          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 41          |
|                                               |                                    |                                    |                                    |                                    | 3                                  | 10                                 |                                    |                                    |                                    |                                    |                             | 42          |
|                                               |                                    |                                    |                                    |                                    | 8                                  | 19                                 | 4                                  |                                    |                                    |                                    |                             | 43          |
|                                               |                                    |                                    |                                    |                                    | 6                                  |                                    | 18                                 |                                    |                                    |                                    |                             | 44          |
|                                               |                                    |                                    |                                    |                                    | 2                                  | 8                                  | 5                                  |                                    |                                    |                                    |                             | 45          |
|                                               |                                    |                                    |                                    |                                    | 7                                  | 6                                  | 3                                  | 1                                  |                                    |                                    |                             | 46          |
|                                               |                                    |                                    |                                    |                                    | 3                                  | 5                                  | 8                                  |                                    |                                    |                                    |                             | 47          |
|                                               |                                    |                                    |                                    |                                    | 1                                  |                                    |                                    |                                    |                                    |                                    |                             | 48          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 49          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 50          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 51          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 52          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 53          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 54          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 55          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 56          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 57          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 58          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 59          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 60          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 61          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 62          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 63          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 64          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 65          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 66          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 67          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 68          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 69          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 70          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 71          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 72          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 73          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 74          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 75          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 76          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 77          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 78          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 79          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 80          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 81          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 82          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 83          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 84          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 85          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 86          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 87          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 88          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 89          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 90          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 91          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 92          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 93          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 94          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 95          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 96          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 97          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 98          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 99          |
|                                               |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                             | 100         |

TABLE T.—FULL-TIME HOURS PER WEEK. RATES OF WAGES PER BY YEARS, 1913 TO 1915—

| Line No.       | Occupation, district, and number of plants.          | Year. | Number of employees. | Average full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. | Employees whose full-time hours per week were— |                      |                 |       |                      |       |                      |
|----------------|------------------------------------------------------|-------|----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------------------|----------------------|-----------------|-------|----------------------|-------|----------------------|
|                |                                                      |       |                      |                                   |                                 |                                    | 48 and under.                                  | Over 48 and under 56 | 56 and under 60 | 60    | Over 60 and under 72 | 72    | Over 72 and under 84 |
| 1<br>2<br>3    | Brannery: Pittsburgh—3 plants.....                   | 1913  | 33                   | 62.7                              | \$0.190                         | \$11.96                            | .....                                          | .....                | 16              | ..... | 17                   | ..... | .....                |
|                |                                                      | 1914  | 37                   | 63.3                              | .199                            | 12.58                              | .....                                          | .....                | 16              | ..... | 21                   | ..... | .....                |
|                |                                                      | 1915  | 30                   | 64.9                              | .205                            | 13.23                              | .....                                          | .....                | 8               | ..... | 22                   | ..... | .....                |
| 4<br>5<br>6    | G. L. and M. W.—1 plant.....                         | 1913  | 4                    | 72.0                              | .190                            | 13.68                              | .....                                          | .....                | .....           | ..... | .....                | 4     | .....                |
|                |                                                      | 1914  | 4                    | 72.0                              | .190                            | 13.68                              | .....                                          | .....                | .....           | ..... | .....                | 4     | .....                |
|                |                                                      | 1915  | 4                    | 69.0                              | .190                            | 13.11                              | .....                                          | .....                | .....           | ..... | 4                    | ..... | .....                |
| 7<br>8<br>9    | Total—4 plants.....                                  | 1913  | 37                   | 63.7                              | .190                            | 12.14                              | .....                                          | .....                | 16              | ..... | 17                   | 4     | .....                |
|                |                                                      | 1914  | 41                   | 64.1                              | .198                            | 12.69                              | .....                                          | .....                | 16              | ..... | 21                   | 4     | .....                |
|                |                                                      | 1915  | 34                   | 65.4                              | .203                            | 13.22                              | .....                                          | .....                | 8               | ..... | 26                   | ..... | .....                |
| 10<br>11<br>12 | Assorters, female: Pittsburgh—4 plants.....          | 1913  | 114                  | 51.5                              | .161                            | 8.30                               | 42                                             | .....                | 72              | ..... | .....                | ..... | .....                |
|                |                                                      | 1914  | 119                  | 51.2                              | .148                            | 7.66                               | 47                                             | .....                | 72              | ..... | .....                | ..... | .....                |
|                |                                                      | 1915  | 124                  | 53.4                              | .160                            | 8.53                               | 48                                             | .....                | 76              | ..... | .....                | ..... | .....                |
| 13<br>14<br>15 | G. L. and M. W.—2 plants.....                        | 1913  | 57                   | 58.1                              | .167                            | 9.67                               | .....                                          | 6                    | 51              | ..... | .....                | ..... | .....                |
|                |                                                      | 1914  | 53                   | 58.0                              | .166                            | 9.62                               | .....                                          | 6                    | 47              | ..... | .....                | ..... | .....                |
|                |                                                      | 1915  | 84                   | 58.4                              | .166                            | 9.65                               | .....                                          | 6                    | 78              | ..... | .....                | ..... | .....                |
| 16<br>17<br>18 | Total—6 plants.....                                  | 1913  | 171                  | 53.7                              | .163                            | 8.75                               | 42                                             | 6                    | 123             | ..... | .....                | ..... | .....                |
|                |                                                      | 1914  | 172                  | 53.3                              | .153                            | 8.26                               | 47                                             | 6                    | 119             | ..... | .....                | ..... | .....                |
|                |                                                      | 1915  | 208                  | 55.4                              | .162                            | 8.98                               | 48                                             | 6                    | 154             | ..... | .....                | ..... | .....                |
| 19<br>20<br>21 | Laborers: Pittsburgh—6 plants.....                   | 1913  | 304                  | 60.9                              | .192                            | 11.71                              | .....                                          | .....                | 99              | 105   | 99                   | 1     | .....                |
|                |                                                      | 1914  | 247                  | 62.7                              | .192                            | 12.02                              | .....                                          | .....                | 12              | 73    | 160                  | ..... | 2                    |
|                |                                                      | 1915  | 232                  | 62.6                              | .194                            | 12.16                              | .....                                          | .....                | 10              | 72    | 150                  | ..... | .....                |
| 22<br>23<br>24 | G. L. and M. W.—3 plants.....                        | 1913  | 271                  | 62.3                              | .186                            | 11.56                              | .....                                          | .....                | 37              | ..... | 234                  | ..... | .....                |
|                |                                                      | 1914  | 222                  | 62.0                              | .186                            | 11.51                              | .....                                          | .....                | 46              | ..... | 176                  | ..... | .....                |
|                |                                                      | 1915  | 212                  | 60.6                              | .186                            | 11.24                              | .....                                          | .....                | 135             | ..... | 76                   | ..... | 1                    |
| 25<br>26<br>27 | Total—9 plants.....                                  | 1913  | 575                  | 61.6                              | .189                            | 11.64                              | .....                                          | .....                | 136             | 105   | 333                  | 1     | .....                |
|                |                                                      | 1914  | 469                  | 62.4                              | .189                            | 11.78                              | .....                                          | .....                | 58              | 73    | 336                  | ..... | 2                    |
|                |                                                      | 1915  | 444                  | 61.6                              | .190                            | 11.72                              | .....                                          | .....                | 145             | 72    | 226                  | ..... | 1                    |
| 28<br>29       | Unclassified—productive: Pittsburgh—6 plants.....    | 1914  | 686                  | 57.9                              | .241                            | 13.83                              | 147                                            | .....                | 135             | 213   | 152                  | 37    | .....                |
|                |                                                      | 1915  | 718                  | 58.1                              | .250                            | 14.34                              | 151                                            | .....                | 145             | 199   | 196                  | 19    | 6                    |
|                |                                                      | 1914  | 585                  | 56.7                              | .255                            | 13.87                              | 164                                            | 69                   | 126             | 70    | 112                  | 23    | 12                   |
| 30<br>31       | G. L. and M. W.—3 plants.....                        | 1915  | 561                  | 59.0                              | .257                            | 14.72                              | 98                                             | 113                  | 75              | 123   | 103                  | 14    | 14                   |
|                |                                                      | 1914  | 1,271                | 57.3                              | .247                            | 13.85                              | 311                                            | 69                   | 261             | 283   | 264                  | 60    | 12                   |
|                |                                                      | 1915  | 1,279                | 58.5                              | .253                            | 14.50                              | 249                                            | 113                  | 220             | 322   | 299                  | 33    | 20                   |
| 32<br>33       | Total—9 plants.....                                  | 1914  | 1,271                | 57.3                              | .247                            | 13.85                              | 311                                            | 69                   | 261             | 283   | 264                  | 60    | 12                   |
|                |                                                      | 1915  | 1,279                | 58.5                              | .253                            | 14.50                              | 249                                            | 113                  | 220             | 322   | 299                  | 33    | 20                   |
| 34<br>35       | Unclassified—nonproductive: Pittsburgh—6 plants..... | 1914  | 320                  | 64.2                              | .231                            | 14.76                              | .....                                          | .....                | 47              | 153   | 73                   | 16    | 1                    |
|                |                                                      | 1915  | 254                  | 64.9                              | .227                            | 14.62                              | .....                                          | .....                | 36              | 113   | 46                   | 29    | 1                    |
|                |                                                      | 1914  | 130                  | 65.4                              | .201                            | 13.92                              | 2                                              | 4                    | 59              | ..... | 26                   | 19    | 14                   |
| 36<br>37       | G. L. and M. W.—3 plants.....                        | 1915  | 146                  | 66.3                              | .220                            | 14.37                              | 2                                              | 6                    | 52              | ..... | 48                   | 14    | 19                   |
|                |                                                      | 1914  | 450                  | 64.6                              | .222                            | 14.52                              | 2                                              | 4                    | 106             | 153   | 99                   | 35    | 15                   |
|                |                                                      | 1915  | 400                  | 65.4                              | .224                            | 14.53                              | 2                                              | 6                    | 88              | 113   | 94                   | 43    | 20                   |
| 38<br>39       | Total—9 plants.....                                  | 1914  | 450                  | 64.6                              | .222                            | 14.52                              | 2                                              | 4                    | 106             | 153   | 99                   | 35    | 15                   |
|                |                                                      | 1915  | 400                  | 65.4                              | .224                            | 14.53                              | 2                                              | 6                    | 88              | 113   | 94                   | 43    | 20                   |

<sup>1</sup> Including 1 employee whose full-time hours per week were 87.

[illegible]



## GLOSSARY OF OCCUPATIONS.

A glossary is here given of the occupation terms found in the iron and steel industry. It covers the principal occupations and many of the minor occupations and local terms used. While not complete, it will be of service in interpreting the figures of the report and in any study of iron and steel labor conditions.

The glossary is arranged by departments and subdepartments, and the occupations are arranged as nearly as practicable in process order. After many occupation terms there are given within parentheses synonymous terms used in some plants.

The definition states briefly the work that is performed and indicates generally the amount of strength and skill required.

When the occupation to any extent leads up to a higher occupation the facts are stated.

### BLAST FURNACES.

#### STOCKING AND CHARGING.

*Bridge operator (Ore-bridge operator).*—Operates an electric traveling crane, known as an ore bridge, in handling ore from boats to stock pile and from stock pile to bins or transfer cars. Controls the movements of the ore bridge on its track and also the movement of the suspended grab bucket by which the ore is picked up and transferred from one end of the bridge to the other. The position is that of a high-grade craneman, requiring considerable skill and experience because of the size of the crane and the speed with which materials are handled.

*Bridge oiler (Ore-bridge oiler).*—Oils ore bridges and assists the bridge operator. Light work, varying from unskilled to skilled, depending upon the experience of the oiler and the opportunity afforded to learn the duties of the bridge operator.

*Bridge laborer (Ore-bridge laborer, Boat laborer, Ore shoveler, Dock laborer, Stevedore, Hatch tender).*—Shovels ore into piles on boat to be removed by grab bucket of ore bridge, or directly into bucket when ore remaining is insufficient to be scooped up by bucket. When grab buckets are not used, fills buckets and hooks cable to buckets. Also cleans up ore that falls from bucket to dock. Unskilled, manual labor with a shovel.

*Leg man.*—Operates leg of Hulett machine removing ore from boats. The machine is a kind of electric crane on which there is a leg or arm in which the operator is stationed. There is a grab bucket at the lower end of the leg. This leg is lowered into the boat, the bucket picks up the ore, the leg is raised and moved so that the bucket comes over a small car into which the ore is dumped for conveyance to the stock pile. The position requires skill and experience, especially in manipulating the leg to clean up the ore in the bottom of the boat.

*Hoisting engineer.*—In charge of steam engine used for unloading ore and coal when there is no ore bridge. The duties are those of a low-grade stationary engineer.

*Fireman.*—Shovels coal under boilers for hoisting engine. Manual labor, requiring but little experience. Training for position of hoisting engineer.

*Hoister.*—Operates levers controlling a hoisting engine causing unloading buckets to raise, lower, and dump. The work is similar to that of the bridge operator but requires less skill and experience.

*Carman.*—Operates lever controlling small car which carries ore from Hulett machine to stock pile. Light work, unskilled.

*Oiler.*—Oils Hulett ore machine. Duties similar to those of bridge oiler.

*Winchman.*—Operates steam winch on ships, which hoists ore buckets from boat to dock. This method of unloading ore is seldom used. Work compares with that of a hoisting engineer.

*Signal boy.*—Stands near material being unloaded and signals the hoister when to raise or lower the bucket, the hoister's position, unlike the bridge operator's, being such that he can not see when the bucket is in place to be loaded. Light work, unskilled, usually performed by boys.

*Bucket hooker and snapper.*—Performs the duties of both signal boy and bridge laborer.

*Car-dumper operator.*—When ore and other materials are received in freight cars, the cars are emptied either by the stock laborers or by a car dumper, a huge machine which lifts a car and turns it on its side, thus dumping an entire carload of material at each operation. The car-dumper operator operates the levers controlling the hydraulic mechanism of the device and also adjusts the clamps to cars of different sizes. Responsible position, demanding considerable mechanical ability.

*Car-dumper oiler.*—Oils car-dumper machinery; assists car-dumper operator.

*Car-dumper laborer.*—General labor at car dumper.

*Locomotive-crane operator (Locomotive-crane engineer).*—Operates locomotive crane around yards, unloading coke, coal, and limestone from cars to stock piles and loading from stock piles to transfer cars to be carried to bins. Also loads pig iron on cars for shipment and does general crane work in connection with the erecting of new buildings, excavating, etc. The duties are similar to those of a yard engineer and craneman, requiring a man of skill and experience.

*Locomotive-crane operator's helper (Hook-up, Hook-on, Locomotive-crane fireman).*—Hooks crane chains to buckets or material to be moved, throws switches, fires, and couples cars. Unskilled light manual labor. Exposed to danger of material falling from crane. An opportunity is afforded to learn the duties of the locomotive-crane operator.

*Transfer-car operator.*—Operates controller on electric transfer car used for transferring materials from stock piles to the stock-house bins. The cars usually are loaded by the ore bridge or a locomotive crane. The work requires some experience and skill, and is analogous to that of motorman. In some places the work is done by the bridge oiler, or a stock laborer; in others by a stock unloader.

*Steam-shovel craneman.*—Operates steam shovel handling materials from stock piles to bins. He controls the movement of the crane, the filling of the bucket, and the dumping of the bucket after it is filled. He also has charge of the crew moving the shovel from place to place. Light manual labor, requiring an experienced employee.

*Steam-shovel engineer.*—Has charge of the engine of the steam shovel. Low-grade stationary engineer.

*Steam-shovel fireman.*—Shovels coal into fire box. Manual work, unskilled.

*Stock unloader (Trestle laborer, Trestle man, Laborer.)*—Unloads melting material (coke, limestone, and ore) into bins from railroad or transfer cars. Usually the cars dump from the bottom and the unloader cleans out the material that sticks in the car or falls on the tracks above the bins. The work varies from light to heavy manual labor, depending upon whether the material can be dumped from the car or must be shoveled out.

*Larry man (Scale-car operator, Larry-car man).*—The electric larry or scale car is a small motor car used to deliver melting materials from stock bins to skip car. A stock bin is opened by a lever, which allows the ore, coke, or limestone to fall into the car. The weight of the material in the car is indicated on a dial. When loaded, the car is placed over the skip pit and the material is dumped into the skip bucket.



The larry man operates the car, records the weight of materials dumped into the skip, and in some places also performs the duties of skip operator. He opens the stock bins and is responsible that the proper amount of material is drawn. The work is light, is quickly learned, and is analogous to that of a low-grade motorman.

*Larry man's helper.*—Keeps larry tracks clean, loosens stock in bins when it sticks, operates switches on larry tracks, loads skip buckets when coke chutes deliver direct to skip. In some places the helper opens stock bins and dumps material from larry car into skip bucket; in other places he is a spare operator who oils the car and spells the larry man. Work performed by an unskilled laborer. Little heavy manual labor, except during winter when stock is frozen.

*Pocket trimmer (Pocket picker).*—When ore is being drawn from the bins into the larry cars, it sometimes sticks and will not run, on account of dampness or freezing. The pocket trimmer loosens the ore with a bar or shovel so that it will run through the chute, and in some places cleans the stock-bin alleys. Unskilled manual labor, moderately heavy, involving the danger of falling into the ore bin and being drawn through the chute with the ore.

*Skip operator.*—Operates engine or motor by which skip bucket containing coke, limestone, and ore is hauled up the inclined runway to the top of the furnace. Also operates mechanism which lowers the bell by which materials are dumped into the furnace. He must see that the furnace is kept filled to a certain point indicated by a gauge, and that the materials charged, and the proportion of each, are as ordered by the superintendent or blower.

The mechanical part of the work requires either a stationary engineer of comparatively low grade or a motor tender. The position requires a man above ordinary intelligence, however, as the success of the furnace operation depends in part upon his accuracy in charging and in recording charges.

*Skip oiler (Hoist oiler).*—Oils hoisting engine, bell mechanism of furnace, skip-car guides, cables, etc. Usually looks after journals of cinder ladles and "breaks in" for extra bridge oiler. Light work, requiring some skill and experience.

*Skip pitman (Skip scrapper, Skip laborer).*—Cleans up material which falls into the skip pit outside of the skip bucket. Common unskilled labor, with shovel.

*Bottom filler (Barrow man, Buggy man).*—Where larry cars are not used, transfers materials from stock piles or bins to furnace hoist. Uses wheelbarrows or buggies which are put on elevators in plants using hand-charged furnaces or emptied into the "skip" in plants using mechanically charged furnaces. Heavy, fairly continuous work, with short rest periods, and performed by unskilled laborers.

*Bottom filler's helper (Barrow man's helper, Buggy man's helper).*—Shovels materials into barrows or buggies when these are loaded from ground, and in some plants spells the bottom filler. Moderately heavy, unskilled manual labor.

*Cager.*—On hand-charged furnaces, supervises and assists in putting barrows on elevator hoist, and signals top filler when to hoist elevator; also, in some places, keeps record of charges. On mechanically charged furnaces, supervises filling of the "skip" by means of which furnace is charged, and signals skip operator; also keeps record of charges. In some plants, however, skip operators perform these duties. On hand-charged furnaces the cager does considerable manual labor, while on other furnaces the work is mostly supervisory, of not very high grade.

*Weighmaster.*—Has charge, under the blower, of the stock-house men at hand-filled furnaces, weighs and records material charged into the furnace. Is responsible that proper amount, as directed by the superintendent, is charged. Semiclerical work.

*Stock-house laborer.*—Cleans up ore, coke, and limestone that falls in stock-bin alleys and skip pit, when such work is not done by the larry man's helper or skip pitman. Unskilled, manual labor with shovel and wheelbarrow.

*Top filler (Topman).*—Operates, on hand-charged furnaces, the vertical hoist by which the barrows of materials are drawn to the top of the furnace; dumps the

materials from these barrows into the furnace hopper, and operates the mechanism by which the bell at the bottom of the hopper is lowered, allowing the materials to fall into the furnace. Hard physical labor, done at an elevation and, in many plants, is exposed to the weather.

*Stock-yard laborer.*—General labor on stock piles, in bins, handling coke dust, tending fires, sweeping, cleaning stock yards, etc. Unskilled work, varying from light to heavy manual labor.

*Coke-dust handler.*—Shovels coke dust from pockets and wheels it to the dump pile or cars. Unskilled, manual labor usually performed by pocket trimmers or stock-house laborers.

#### BLOWING.

*Blower (Turn foreman, Furnace foreman).*—In charge of the working of furnaces, under the direction of the superintendent. Usually the superintendent determines the proportion of materials charged, the number of revolutions the blowing engines are to make and the temperature to be maintained, the blower being responsible for carrying out his orders. The superintendent also fixes the approximate time when the furnace is to be tapped. The blower determines the exact time and manner of tapping and has charge of the entire casting force. The work is largely supervisory. It requires considerable practical working knowledge and occasionally demands a great deal of manual work.

*Stove tender.*—Has charge of the regenerative stoves in which the blast is heated by the waste furnace gases and, under the direction of the blower, is responsible for the proper heating of the blast. Changes the stoves periodically (usually every hour) by admitting air into those in which the brickwork is hot and gas into those that are to be heated. As it takes but a few minutes to change stoves, the stove tender is usually assigned to other duties, such as keeping the blowpipes and tuyère glasses clean, tending the water-circulation system and gas washer, taking test samples of cinder and iron, etc. The mechanical part of the work of changing stoves can be learned in a few days as it consists chiefly in manipulating the valves by which the flow of gas and air is controlled. The work is comparatively easy but varies according to the extra duties assigned.

*Stove cleaner.*—Removes, shovels into wheelbarrows, and takes away, the cinder, dust, and various débris that accumulate in the stoves. This work is not heavy and requires little skill or training. The position is usually filled by an unskilled laborer.

*Flue-dust laborers.*—The gas coming through the downcomer of the furnace passes through the dust catcher, the dust collecting in a pocket in the bottom. The flue-dust laborers, by opening a chute, cause the dust to fall into a car, although in some places it is put into wheelbarrows and wheeled away. They also sprinkle the flue dust with water as it is loaded into the cars. Light, unskilled, manual labor, usually done by stove cleaners.

*Gas-washer man.*—In charge of operation of the gas washer. Tends apparatus by which furnace gases are washed before being used in the gas engines or under the boilers and, in some plants, before being returned to the stoves. Comparatively simple and slightly skilled work. Types of gas washers differ widely in construction and in mode of operation.

*Gas-washer laborer.*—General labor around gas washer, unskilled.

*Blowing engineer (Stationary engineer, Steam blowing engineer, Gas blowing engineer).*—In charge of steam or gas blowing engines and, under the direction of the blower or superintendent, regulates the number of revolutions the engines make per minute. Also in charge of machinery generating electric current for motors, transfer cars, etc. The work is that of a stationary engineer of the highest grade.

*Assistant blowing engineer (Checker, Second engineer).*—Assists blowing engineer. The position may be considered as a training for the higher position of blowing engineer.

*Pump tender (Pump man).*—Operates pumps supplying water for cooling furnaces and for gas-washing system. In many plants the pumps are in charge of the blowing engineer. Light work, semiskilled.

*Oiler, blowing engines (Oiler and wiper, Bottom oiler).*—Oils and wipes blowing engines, pumps, etc., in engine room. The position requires a man of some skill, but, most of all, of experience, in order to avoid injury from moving machinery. An opportunity is afforded to learn the work of the blowing engineer.

*Engine-room laborer (Janitor).*—Carries oil and waste, cleans up, scrubs floors, etc. Light, manual labor, unskilled.

*Oiling-system operator.*—Operates oil-pumping system and filters for gas-blowing engines.

*Engine-house crane-man.*—Operates crane in blowing-engine house. The crane is not used very often, but when it is used it is usually operated by a handy man or operator taken temporarily from another crane.

#### CASTING.

*Keeper.*—Has charge, under the direction of the blower, of tapping the iron and cinder from the furnace. The greater part of the actual work—drilling the hardened clay out of the tap hole—is done by the keeper's helpers, though the keeper usually holds the bar by which the clay is removed or operates the compressed-air or electric drill for accomplishing the same purpose. While the metal is being run off the keeper directs its flow into the ladles or into the casting bed, and often does much of the work. After the cast he directs the work of closing the tap hole with clay and operates the "mud gun" which is used to force the clay into the tapping hole. The position of keeper is one of responsibility, and requires considerable experience. It may be regarded as training for the higher and more responsible position of blower. The keeper acts as blower in case the latter is absent, and in some places regularly performs the duties of blower on the night turn. The work of the casting crew (keeper, keeper's helper, and cinder snapper) is intermittent under ordinary conditions, since the work is done only in preparation for and during the casts (except for the tapping of cinder). These casts occur only every four to eight hours under normal conditions, and the actual time that the crew is busy during a turn varies from about 50 to 80 per cent. The tapping of the cinder varies in frequency according to the size of the furnace and to the nature of the materials charged. While casting and tapping cinder the crew is exposed to intense heat and sulphur fumes at times, and to the danger of burns from hot metal and sparks. Safety shields and respirators are provided in many places.

*Keeper's helpers.*—The first helper, during a cast, usually tends the skimmer which separates the slag from the iron, keeps the metal running, and assists the keeper in closing the tap hole. After the cast is finished he cleans the skimmer, puts up the iron dam, adjusts the cut-out runner gates, and helps to clean and line the main trough. If the keeper is absent during a cast the first helper usually takes charge of the furnace crew.

The second helper cleans the runners after a cast, lines them with sand, and wheels old sand away. During the cast he helps keep the metal running, tends the runner gates, and assists in closing the tap hole of the furnace.

At many furnaces the work of the keeper and helpers (except tapping) is interchangeable. At times all break scrap, wheel sand, line runners, and clean up. Test samples of slag and metal are taken of each cast by the helpers or some other employee assigned to the work. The work of breaking scrap, cleaning up, and wheeling materials is sometimes done by third and fourth helpers, or furnace laborers.

*Cinder snapper.*—The keeper usually opens and closes the cinder notch, the cinder snapper's duties being to keep the cinder and slag moving through the runner and to clean the runner after the cinder has been tapped. Also keeps the slag flowing through runner to cinder ladle when the furnace is being tapped, and after the cast cleans up the slag and wheels or carries it away. Unskilled, manual labor.

*Clay man.*—Prepares clay and loam, makes it into balls for filling tap hole, and wheels it to furnace. In some places cokes ladles, wheels in coke dust, handles tools and cleans up. Duties are performed by cinder dumpers, cast-house laborers, or stove cleaners in some places. Light manual labor, requiring but little skill or experience.

*Tuyère man.*—Fits and changes tuyères (the water-cooled pipes through which the blast enters the furnace), regulates and keeps in repair the water-cooling system by which the lower part of the furnace, or hosh, is kept cool. In many plants no separate occupation is carried for this work, which is done by pipe fitters whenever necessary. The work is largely that of a pipe fitter. Although they are employed around the furnace, many of the conditions of danger and discomfort mentioned as applying to keepers and their helpers do not apply to the tuyère men. They are not on the floor during the cast, except in emergencies.

*Water tender.*—Tends the water and cleans the water-cooling system of the furnaces, changes screens, assists in changing tuyères, and takes samples of casts. The work varies from light to heavy manual labor. An experienced employee is required for the position, which, in some plants, is ranked higher than that of keeper.

*Cast-house laborer.*—General labor around cast house, wheeling coke dust, sand, and scrap; also breaking scrap and cleaning up. Unskilled, manual labor performed by keepers' helpers or cinder men in some places.

*Scrap man.*—Picks scrap left in the runners after casting, or collected in the yards, and loads it into the "skip" or charging buggies. Requires no large amount of manual labor or skill.

*Coke-dust man (Ladle coker).*—Wheels coke dust and covers iron in ladles to prevent chilling. This work is done by keeper's helper at many furnaces. Unskilled, manual labor, exposed to intense heat while covering iron.

*Test carrier (Sampler).*—Carries samples of cast from furnace to laboratory for analysis.

*Molder (Chill molder).*—Prepares sand beds for casting when pigs are cast on the floor; also makes molds for castings used around the plant. These castings are made from hot metal taken from furnace during a cast. Position requires a man highly skilled in the work, which is light.

*Cast-house craneman.*—Operates electric crane handling sand, clay, flue dust, scrap, and sand-bed castings in cast house. In some places where sand-bed castings are broken up by a hydraulic pig breaker, he operates both the crane and the pig breaker. Light work, requiring an experienced employee.

*Barman.*—Guides sand castings by means of a long bar so that crane hooks supporting the castings will not be struck by plunger of hydraulic pig breaker. Unskilled, manual labor.

*Hooker-on.*—Hooks crane chains to pigs cast in sand bed and when pig is lifted from bed knocks loose sand off with a sledge hammer. Moderately heavy, unskilled, manual labor.

*Waterer.*—Sprays pigs cast in sand mold with water to hasten cooling. Done by iron carrier or hooker-on in some places. Unskilled, light manual labor.

*Iron breaker.*—When iron is cast in sand beds, or chill molds, the iron in each of the molds is known as a "pig," and that in the "runner," by which iron is led to the mold, is known as the "sow." It is the duty of the iron breaker to shovel sand over the molten iron, spray it with water, break the pigs from the sow, and to break the sow into convenient lengths. In some establishments where the work is not specialized he also performs the duties of iron handler. In plants where the iron is used in a molten condition or cast in pig machines this work is entirely eliminated. The work is done with heavy sledges and bars and is very hard manual labor, but it is usually

arranged that breakers are relieved by "spell hands" or do lighter work during the intervals between casts, and they are usually allowed to go home as soon as their daily task is completed, so that the actual amount of working time for this occupation is not over 10 hours per day, and frequently is less than 10 hours.

*Iron handler and loader.*—Carries iron from the casting floor and piles it in the yard or loads it on cars. This work is frequently divided between two occupations: Iron carrier, who removes the iron from the casting floor; and iron loader, who loads it on cars. The work is essentially the same for both occupations. The work is heavy manual labor, requiring little more than strength and endurance. It is usually intermittent in character, though in some places it is so arranged that the men work continuously for shorter hours. In most plants the iron is loaded directly from the pig machine or from the piles with magnet cranes.

Iron breakers, iron handlers, and loaders sometimes work interchangeably.

*Pig-machine craneman (Pouring operator).*—Operates crane handling metal in the pig-machine casting house. The ladle of metal is lifted from the car in which it is brought from the furnace and placed in a machine or device which may be tilted by a crane to pour the metal, the crane being operated by the craneman as directed by the pig-machine foreman. In some places the ladle is placed on a small car with an electric tilting device, in which case the pouring is done by one of the pig-machine men.

*Pig-casting machine operator (Pourer, Iron pourer, Motorman).*—The ordinary pig machine consists of a series of molds mounted on an endless chain into which iron is poured from a ladle. The molds then pass under a water spray which hardens the metal and the pig drops from the mold at the end of the machine. As the molds return to the pouring ladle they are sprayed with a tar, lime, or clay wash to prevent the iron from sticking. The operator has charge of the pouring, doing the work himself if the ladle is poured from an electric car, or directing the work if the ladle is tilted by the craneman. The work is light, but an experienced man is required for the position.

*Pig-machine runner man (First helper).*—The runner man keeps the trough, from ladle to molds, clear of graphite and chilled iron while iron is being poured. Unskilled, manual labor, with exposure to intense heat and danger of burns from sparks while pouring.

*Pig-machine laborer.*—Removes with a sledge or bar any pigs that stick in the molds (*Knocker out*). Prepares and sprays molds with lime, tar, or clay wash to prevent iron from sticking (*Lime man*). The newer machines are equipped with an automatic knocker and sprayer. Light, manual labor requiring no skill or experience.

*Ladle cleaner (Sculler).*—Removes the slag and sculls of metal and cinder from the ladle. The work requires some skill and experience and is hard and heavy, much of it being done while the ladle is hot. The ladle cleaners also help load the sculls on cars in some instances.

*Ladle liner.*—Repairs and replaces linings of ladles. If the ladle is merely patched by smearing clay over slight breaks in the lining, the work requires but little skill or experience. If, however, the ladle requires a complete lining, the work is done by bricklayers who are skilled and experienced in such work.

*Barman (Toolman).*—Carries furnace tools and bars to and from blacksmith shops. Unskilled, manual labor.

#### MISCELLANEOUS.

*Cinder-pit craneman (Cinder craneman).*—At some furnaces the cinder and slag are run into pits. As the cinder falls into the pit it is sprayed with water, which causes it to granulate. The cinder-pit craneman operates an electric crane, which removes the granulated cinder from the pit to cars for shipment or to dump. Steam hoists and locomotive cranes are used also for handling cinder. Light manual labor, requiring but little skill or experience.

*Cinder-car operator*.—Works around the cinder crane, guiding the bucket, shoveling cinder that falls to the ground, leveling the granulated cinder loaded on cars, etc. Unskilled manual labor, moderately heavy.

*Cinder man (Cinder-pit laborer, Cinder-dump laborer)*.—Handles the cinder on its way to and at the cinder dump; also, cleans up the cinder pits and cleans away cinder around the furnaces not cared for by the cinder snappers. The work is unskilled and varies greatly in severity, some of that on the cinder dump being very hard, while much of the cleaning up is comparatively light and easy.

*Cinder-ladle oiler*.—Oils journals of cinder ladles. Work usually done by the skip oiler. Light work, practically unskilled.

*Scrap-drop operator (Scrap-drop engineer, Scrap-drop craneman)*.—Operates steam or electric scrap-drop crane or hoisting engine, which manipulates a bucket or magnet for loading scrap on cars, or raises an iron ball, that is dropped on sculls to break them. The work is that of a low-grade stationary engineer or craneman.

*Scrap-drop laborer (Scrap picker)*.—Unloads and reloads scrap and breaks ladle sculls. Acts as crane hooker for scrap-drop crane. Unskilled manual labor, with the usual danger work around hoisting cranes.

*Ball man*.—When scrap-drop hoist is used instead of a crane, the ball man swings the ball so that it will fall on the sculls when released by the hoist. Unskilled, manual labor.

*Engineer, locomotive*.—Operates locomotive on either narrow or standard gauge track used for carrying cars of ore, coke, or limestone to stock bins; molten metal to the Bessemer or open-hearth furnaces, or pig machine; cinder to the cinder dump, etc. The work is similar to that usually performed by locomotive engineers in freight yards.

*Fireman, locomotive*.—Usual duties of a locomotive fireman.

*Laborer, general yard (Pig-iron loader and unloader, Sweeper, Iron piler)*.—General labor around furnace yard, loading pig iron from stock for shipment, etc. Light to heavy, unskilled, manual labor.

*Oil-house man*.—Filters oil, washes waste, and distributes same. In some places filters water for boilers. Light work, semiskilled.

*Pig-conveyer operator (Pig-conveyor operator's helper)*.—Operates and repairs conveyor which carries iron from pig machine to Bessemer stock yard.

*Pipe fitter (Tuyère man)*.—Attends and repairs piping on steam and water fittings, etc.

*Tool-room man (Toolman, Tool keeper)*.—In charge of mechanical tools and does some minor repair work.

*Water carrier*.—Carries water for drinking purposes. Unskilled; done by boy.

#### SINTERING FLUE DUST.

*Flue-dust laborer*.—Sprinkles flue dust in cars with water, dumps cars, and shovels out flue dust that sticks to sides of cars. Moderately heavy, unskilled, manual labor. Very dusty and dirty work.

*Craneman*.—Operates crane which transfers ore from stock pile to mixer.

*Mixer man*.—Opens chute to allow flue dust to fall into mixer, controls flow of water into mixer, and operates the mixer machine which makes a paste of the ore and water. Light work, unskilled, but requiring some experience in order to keep the ore at the proper consistency.

*Charge-car man*.—The ore goes from the mixer on a conveyor to a bin. Charge-car man opens chute of bin and fills the charge car, runs the car to the pans, and dumps the ore. Light manual labor, all operations being done by means of levers. Low-grade motorman.

*Igniter man*.—In charge of sintering crew, and responsible for proper sintering of ore. Ignites flue dust and dumps pans after dust is sintered when self-dumping

conveyor is not used. The work is largely supervisory and requires a man with considerable experience.

*Pan floor man.*—Cleans sintering pans and grates, knocks out ore that sticks in pans, helps dump ore into pans, levels ore in pans for burning, assists and works under direction of igniter. Heavy, unskilled, manual labor, exposed to heat from burning dust.

*Hoist man.*—Operates lever-controlled electric hoist which carries sintered ore to screen house, and which automatically dumps the ore on the screens where the dust is separated from the ore. Light work, requiring man of ordinary intelligence.

*"Fines" car man.*—As the ore passes over the screens, the fine dust goes into a bin. The "fines" car man opens the chute of the bin, allowing the dust to fall into a hand car. He then pushes the car to the mixer where he dumps the dust, to be resintered. Heavy and dusty, unskilled, manual labor.

*Oiler.*—General oiler of machinery. Light, unskilled work.

#### BRIQUETTE WORK.

*Flue-dust laborer.*—(Same description as for Flue-dust laborer, above.)

*Pressman.*—Controls flow of dust and adhesive medium into machine, and operates the machine. The machine, which is practically automatic, mixes the flue dust with the adhesive medium, presses it into bricks in hydraulic molds, bakes it by steam heat, and discharges the briquettes upon a conveyor which carries them to the stock pile. Light manual labor, semiskilled, and requiring a man above ordinary intelligence.

*Piler.*—Takes briquettes from conveyor and places them in piles or loads them on cars. Heavy, unskilled, manual labor.

#### BESSEMER CONVERTERS.

##### STOCKING AND CHARGING.

*Stocker and Stocker's helper (Barrow man, Coke and limestone wheeler, Metal loader and wheeler, Stock unloader, Pig-iron unloader).*—Unload pig iron, coke, limestone, and scrap from cars to stock piles; load these materials on wheelbarrows or buggies and take to hoist or dump into skip of cupola.

*Cupola hoist man (Hoist man, Skip operator, Skip engineer).*—Operates the hoist upon which materials are raised from the ground level to the charging level of the cupolas. In some places the cupola is equipped with a skip hoist the same as a blast furnace, in which case the duties are similar to those of a skip operator. Practically no skill required. Comparable with the work of freight-elevator operators. The work is frequently done by boys or common laborers.

*Cupola charger (Top filler, Top man).*—Wheels materials in barrows from the hoist and dumps them into the cupola. This work is done in some plants by the use of a charging machine, similar in general plan to the open-hearth charging machine, or by a skip hoist, which mechanically fills the cupola, similar to that in blast-furnace practice. Hand filling is hard, hot work, and in many ways similar to the work of top fillers at the blast furnace, a cupola resembling in general plan a miniature blast furnace.

*Cupola melter (Cupola tender, Cupola foreman).*—Has general charge of the cupola and crew, regulates the blast, and directs the tapping of the metal. The position is largely supervisory, requiring a man with some practical experience.

*Cupola melter's helper (Second melter).*—Taps cinder from cupola, cleans cinder runner and floor, and covers metal in ladles with coke dust after tapping, when the cupolas are distant from converters. Moderately heavy, unskilled manual labor.

*Cupola tapper.*—Taps iron and cinder from cupolas at direction of melter; also cleans up the metal and the cinder runners. The work is sometimes divided into

iron tapping and cinder tapping and is somewhat analogous to blast-furnace practice, though it is much lighter. In some plants the melter does the iron tapping, the cinder tapping and cleaning up being done by his helper.

*Cupola tapper's helper.*—Wheels clay ("ball stuff") used in tamping holes and lining runners. Light, unskilled, manual labor.

*Cupola liner (Cupola patcher).*—Relines the cupolas with refractory material; also usually does other work, such as bottom making and ladle lining, when not employed at regular duties. Where there are only a few cupolas this work is done by the ladle liners or melters. In most cases nothing more than patching with fire clay is necessary, which can be done by comparatively low-grade men. The work is disagreeable and carries some danger from the falling of sculls and loose materials, although this can be effectually prevented.

*Cupola liner's helper (Cupola patcher's helper).*—Wheels the materials needed, and generally assists the cupola liners in the performance of their duties. Light, unskilled, manual labor.

*Cupola locomotive engineer (Ladle-car engineer).*—Operates locomotive delivering hot metal from cupolas to mixer. Duties similar to those of an engineer in freight switching yards.

*Cupola locomotive switchman.*—Couples and uncouples cars and throws switches on tracks leading to cupola.

*Mixer craneman.*—Operates crane which empties ladles of metal from blast furnace or cupola into the mixer. In small establishments also oils and greases the crane. High-grade craneman.

*Mixer ladle-crane oiler.*—Oils machinery of crane used to empty ladles of metal into mixer, where oiling is not done by craneman.

*Ladle skimmer.*—Skims slag and coke dust from metal in ladles received from blast furnace or cupola before iron is poured into the mixer and keeps the mouths of the iron ladles clean from deposits of metal and slag. Unskilled, manual labor.

*Mixer man.*—Weighs metal received from blast furnaces and delivered to converter vessels, operates metal mixer, and handles metal from time received in ladles from blast furnaces until delivered into ladles for vessels. The position is largely supervisory, although in some places the mixer foreman operates the lever for pouring metal from the mixer, patches noses, and makes ordinary repairs.

*Mixer lever man.*—Operates lever which tilts the mixer and pours metal into ladle to be delivered to vessels. Light work, requiring some experience.

*Mixer slag man, first.*—Operates oil burner, pulls slag from pouring-out hole, helps skim slag from metal in ladle before it is poured into mixer, and patches mixer nose when necessary. Unskilled, manual labor.

*Mixer slag man, second.*—Stands at side door and pushes slag from surface of metal in mixer to pouring-out nose, prepares nose-patching material, helps scull and patch runners, and helps skim slag from metal in ladles. Unskilled, manual labor.

*Runner man, first (Iron pourer, Trough man).*—Operates electric or cable car that carries iron ladle from mixer to converter vessels; also dumps the iron into the vessels with a hydraulic machine. When metal is not poured directly into converter vessel, adjusts movable clay-lined runner for pouring into vessel from a point at the side and to rear of vessel mouth. In some plants the runner man weighs manganese and puts it into the vessel as directed by the blower. Skilled labor requiring little exertion, but involving exposure to high temperature for short intervals.

*Runner man, second (Crane hooker, Hook-on, Ladle watcher).*—Hooks dumping device to ladle which empties contents into vessel, wheels manganese from stock bin to vessel, and assists scrap man in throwing scrap into vessel. Unskilled, manual labor, moderately heavy, with exposure to heat at short intervals.

*Vessel scrapper (Vessel scrapper helper, Scrap man).*—Wheels and charges steel scrap into the mouth of the converter, at the signal of the blower, to lower the tempera-



ture of the molten metal. (In some plants this occupation is eliminated by introducing a little steam with the blast. "Scrapping" is usually preferred, however.) In some plants the scrap is shoveled into the mouth of the converter when it is turned on its side. During the few moments of actual exposure the heat is intense. The position is filled by relatively unskilled workmen. In other plants the scrap is charged by means of a chute while the converter is in an upright position, and when this is the case the conditions in respect to heat are rendered quite tolerable.

*Scrap man (Scrap-car laborer).*—Cleans up scrap, loads on buggy, wheels to converter, and throws into vessel, as directed by the blower. Unskilled, manual labor.

#### CONVERTING.

*Blowing engineer.*—In charge of and operates engine which furnishes the blast for the converter and the cupolas. The work is of lower grade though of the same general nature as that of the blowing engineer in the blast-furnace department.

*Oiler and wiper.*—Oils and wipes blowing engines and assists engineer. In small establishments the oiling and wiping are sometimes done by the engineer.

*Blower.*—In charge of the converters and directly responsible for the conversion of the molten metal. The specific duties consist in regulating the blast, the valves being controlled by levers in the "pulpit" (an elevated platform opposite the converters), and in regulating the temperature by admitting steam with the blast or by signaling the vessel scrapper to add cold scrap. The blower decides when the heat is fully "blown," tilts the converter, or orders the first regulator to do so, and signals what quantity of recarburizer shall be added as the metal runs into the ladle. This is one of the most responsible positions in the entire industry and highly skilled operators are required. All decisions as to the temperature and chemical state of the metal are made almost entirely on the basis of the color and general appearance of the flame. The work requires constant attention, the process being repeated every 8 to 15 minutes.

*Regulator, first (Assistant blower).*—Under the direction of the blower, operates the hydraulic levers by means of which the vessel is tilted to receive metal and during the course of the blow to receive scrap, etc.; also to pour the metal into ladles. This is a responsible position and requires experience and good judgment. The first regulator is on the platform with the blower, and the position may be regarded as one of training for that of blower. In some plants the blower instead of the first regulator tilts the vessel for pouring.

*Regulator, second (Pouring craneman, Steel craneman).*—Operates the levers which control the movements of the hydraulic jib crane on which the casting ladle is mounted. The ladle is placed to receive the metal poured from the vessel, and when filled is swung around over the molds at the pouring platform. After the metal is cast the ladle stopper is removed, the ladle tipped so that the slag and cinder runs from it, and the nozzle cleaned. It is then brought back into position and the stopper replaced. In some of the large plants operating three or four converters the work is somewhat differently divided, the first regulator controlling the converter only until the heat is blown, when a second regulator handles it for dumping, inspecting, and repairing bottom, etc., while the third regulator controls the ladle cranes. In addition, the second or third regulator frequently operates the "car pusher." Light work requiring a highly skilled and experienced employee.

*Vessel man and Vessel man's helper (Vessel foreman).*—Are responsible for maintaining the converter in good working order. Their duties consist (1) in inspection, (2) in changing and repairing bottoms, (3) in sculling, patching, and relining. After each "blow" the vessel is turned down so that the condition of its lining and particularly the bottom, where the blast is introduced through tuyères and which is subject to the greatest wear, may be inspected. If the inspection shows the bottom to be in bad condition with the tuyères nearly burned out, which occurs after from 20 to 30 heats, the entire bottom, which is constructed so that it may be easily removed,

is taken off and a new bottom, which has been prepared by the bottom makers, is put on. The new bottom is placed on a hydraulic jack, stationary or mounted on a movable truck, directly under the converter, the outer edges of the bottom are covered with a ring of moist fire clay to give an air-tight connection with the vessel, and the whole is then pressed tightly against the bottom of the vessel by the hydraulic jack and held in place until the connections have been made. This operation is performed with remarkable rapidity. If only one or two tuyères are shown to be badly burned, it is necessary only to "blank" them by closing the air holes with refractory material. When slag or other accretions collect on the nose of the converter, the vessel men or the helpers pull or pry it off with a long rod or bar. If the inspection shows a bad spot in the vessel lining, it is repaired by throwing wet "ball stuff" on it and roughly tamping it down. When the lining is worn out, which occurs in the ordinary acid converter only after several thousand heats, the vessel men completely reline it. The duties also include, where no separate occupation is carried for the purpose, the cleaning of "sculls" and "spittings" from the shield or stack into which the converter blows.

The vessel men and helpers regularly work as a crew and there is little differentiation of duties, except that the vessel men supervise all the work and perform those parts which require experience and skill. The helpers are of all grades; some do the most difficult work, while others do little more than wheel materials. The position of vessel man is one which requires long experience and good judgment, and as emergencies must frequently be met, the men must have the ability to think and act quickly. The work is intermittent in character, with short periods of the greatest activity followed by long periods of comparative inaction, save for inspection, to which one man can attend.

*Vessel laborer.*—Wheels patching material from crusher to vessel floor for vessel men and runner men. This material is sometimes lifted to vessel floor by crane and wheeled to vessel by vessel man's helper. Unskilled, manual labor.

*Shield cleaner.*—Cleans spittings from shields and vessel floor and helps scull runners. The loose spittings are usually cleaned from the shield by the vessel man's helper or runner man after each blow, to prevent accumulations, while "sailors" remove spittings that stick to the shield and to overhead cables. The work is light and requires no experience except in climbing to clean cables and upper part of shield.

*Manganese breaker.*—Breaks manganese and wheels it to vessel floor, or shovels into boxes to be hoisted to vessel floor by crane. Unskilled, light manual labor.

*Manganese heater.*—In charge of a small furnace in which ferromanganese or spiegel is heated for recarburizing the blown metal; usually has helpers, who break and wheel materials and help to keep up the fire. The position is one requiring considerable experience to maintain the proper temperature. There is little heavy work connected with the position, but there is considerable exposure to high temperatures, due not only to the nature of the occupation but to the position of the furnace.

*Manganese man (Manganese wheeler).*—Weighs cold manganese, wheels to vessel, and charges same into steel ladles, as directed by the blower. The charging is sometimes done by the runner man. Light manual labor, unskilled.

*Scrap hoist operator.*—Operates hoist which is sometimes used instead of a crane to lift scrap to scrap platform. Unskilled, light work.

*Clean-up.*—Cleans up slag and steel that spills on vessel floor. Moderately heavy manual labor, requiring no skill or experience.

*Bottom and ladle house craneman.*—Operates electric crane handling vessel bottoms and material in the bottom house and ladles in the ladle repair shop. In some establishments there are separate cranes for the bottom house and ladle repair shop.

*Bottom maker and Bottom maker's helper.*—Rebuild converter bottoms. The essential parts of the bottom consist of (1) a cylindrical steel casing sloping out at the top to the diameter of the vessel, the lower part forming the "blast box" into which the

blast is admitted by a large pipe. (2) Above the "blast box" is the refractory bottom, which is pierced by a large number of small holes for admitting and distributing the blast in the vessel. In acid vessels these tuyères, or holes, are formed in fire-clay bricks of special design (in practice the entire brick is known as a tuyère), around which ganister is rammed. When the bottom is removed by the vessel men, the bottom makers and helpers cool it with water and then chip out all the ganister and knock out the tuyère bricks. New tuyère bricks are then placed in position, and moist ganister is tightly rammed around them until it is level with their top. The entire bottom is then placed in an oven, where it is kept at a steady heat until thoroughly dried. In addition to this work the bottom maker's helper in many plants also grinds the refractory materials used for this purpose and for repairing vessels and ladles. The work is done by the bottom makers and helpers working as a crew and there is usually little distinction of duties. Bottom makers not only supervise the work, but also do a large part of it. They must have considerable experience and must exercise extreme care, so that the position is one of some importance. The helpers vary considerably in grade.

*Bottom-oven fireman.*—Fires ovens used for drying bottoms. Moderate manual labor, practically unskilled. Oil or gas burning ovens are usually controlled by the bottom maker.

*Crusher man, first (Pan man).*—Has charge of machine crushing and grinding refractory materials used for patching and lining bottoms, vessels, ladles, mixers, runners, and iron notches of blast furnaces. Helps dump material into machine and sees that the grinding is done properly. Light manual labor, practically unskilled.

*Crusher man, second.*—Loads refractory material into wheelbarrow, brings to grinding machine, and assists first crusher man. Unskilled, manual labor.

*Mixing-house engineer.*—Operates crushing and grinding engine and machinery. Electric power is used in some plants, the machine being operated by the crusher man. Low-grade stationary engineer.

*Mixing-house oiler.*—Oils grinding and mixing machinery. Light, unskilled, manual labor.

#### CASTING.

*Stopper setter.*—Removes old stoppers from the ladles and inspects and places in position the new ones. In a few plants the stopper setter also removes the old nozzle and sets in place a new one. The position is one which requires a large amount of experience and more than ordinary care, because a mistake in selecting or setting the stopper means almost certain injury to an employee.

*Stopper setter's helper.*—Carries new stoppers to pouring platform, delivers used stoppers to stopper maker, wheels material used by stopper maker, helps to set stoppers, and does general labor work. Unskilled, light manual labor.

*Steel pourer (Ladle man).*—In charge of and does the actual work of pouring (teeming) the steel from the ladle into the molds, and in some places sets the ladle stopper in position. The flow of metal is controlled by a lever on the side of the ladle, attached to the stopper within the ladle. The pourer determines to what height in the mold the steel should be poured to give an ingot of the desired weight. He is in general charge of the entire casting crew of a mill and is responsible for the metal from the time it is tapped from the furnace until the ingots are ready for delivery to the blooming mill. Either he or one of his helpers makes a test casting from each ladle, which casting is given chemical analysis. The position is one requiring some practical knowledge of metallurgy, but chiefly long experience in the handling of molten steel.

*Mold-car pusher (Car mover, Mold-car operator, Car pusher, Stand lineman).*—Operates levers to move mold cars under pouring ladles, and in some places assists the blower in tilting the vessel back for a new heat. Light work, unskilled, usually performed by boys.

*Mold capper (Platform man).*—Puts aluminum or other material into mold during pour to stop boiling of metal, though this work is sometimes done by the steel pourer. Places an iron plate or "cap" on top of the mold and secures it by means of a bar inserted under two lugs. Sometimes sprays top of mold with water to hasten cooling. After the steel has partially cooled, knocks bar out and removes cap. In addition the mold capper usually has other minor duties and acts as a steel pourer's helper. In any case, skill is required, and the severity of the work through exposure to extreme heat varies greatly.

*Platform man (Mold cleaner).*—Marks molds with chalk to show the length of ingot, catches the metal for tests, and cleans scrap off molds. Unskilled, manual labor, with some exposure to heat while pouring.

*Test carrier.*—Carries tests and reports to and from laboratory.

*Cinder pitman (Vessel slag man, Pit slag man).*—Cleans up and removes the cinder and metal from the pit or floor of the Bessemer building. The work is as a whole unskilled. It is, however, for the most part, hard manual labor done under conditions of great heat when working around and under the vessels and ladles.

*Ingot stripper (Stripper man).*—Operates the crane for stripping ingots. In the modern plants the ingots are cast in molds mounted on small cars, which are brought one at a time in front of the steel pourer's platform. After the ingots have sufficiently solidified these cars are removed by locomotives to the ingot stripper, which is frequently located some distance away, and in plants using both the Bessemer and open-hearth processes often does duty for both. The ingot stripping machine is an overhead hydraulic or electric crane of large capacity, equipped with special jaws for gripping the lugs on the side of the ingot mold, and special apparatus for lifting the mold clear of the ingot. Between the jaws is located a large plunger, which can be made to enter through the hole in the top of the mold and exert a pressure on top of the ingot when the mold is lifted. All operations are controlled by levers or controllers in the crane cab. The work requires considerable experience and judgment.

*Ingot-stripper laborer (Ingot-stripper cable puller, Ingot-stripper winchman, Mold washer, Mold tar man, Mold shaker, Stool cleaner).*—Sees that stripper crane hooks to molds properly and assists stripper man; in some places operates a winch that moves ingot cars under the stripper; in other places, washes, scrapes, and muds molds to prevent ingots from sticking. Moderately heavy, unskilled, manual labor.

*Cinder-dump craneman.*—Operates crane handling cinder and slag at dump, loading scrap for "scull drop," and in some cases skimming furnace metal before it is put into the mixer. Low-grade craneman.

*Cinder-dump crane hooker.*—Directs work done by craneman at cinder dump and hooks on tongs and cables. Unskilled, light manual labor.

*Cinder-dump laborer (Cinder yardman).*—Breaks and loads slag and scrap at cinder dump.

*Ladle craneman.*—Operates crane which changes intermediate and steel ladles when patching or repairing is required. Also loads scrap and assists stopper setters.

*Ladle liner (Ladle patcher).*—Patches and relines the ladles in which iron ("direct metal") is brought to the converter or in which steel is handled. The ladles may be patched while still hot by throwing damp clay on the defective spots and tamping it into place. For relining or any considerable repairs the ladle must be removed. In either case the ladle is first cleaned by the ladle liner's helpers, and either the entire lining or such part of it as the ladle liner judges on inspection to be defective is removed. If the ladle is to be entirely relined it is done by the ladle liners, with the assistance of the helpers, by building a wall of fire brick, usually in two courses, around the entire inside of the steel casing. The bottom lining is then made by throwing in moist "ball stuff" (the most refractory of clay), which is tamped down until a homogeneous compact lining is formed. The whole of the brick wall around the sides is then covered with fire clay, which is rammed to fill all cavities between

the bricks and to present a smooth surface. A fire (gas, oil, wood, or coke) is then lighted inside the ladle and kept burning until the ladle is entirely dried out. The position of ladle liner is usually filled by skilled bricklayers.

*Ladle liner's helper (Ladle liner's laborer).*—Removes sculls of slag and metal from the ladles; removes the entire ladle lining or such part as directed by the ladle liner; brings the materials required by the ladle liner; helps to tamp down the clay lining; and, in general, assists the ladle liner in his work. Cleaning and removing ladle linings is particularly hard work, and, as the ladles are cleaned as soon as possible after the metal is cast, the work is frequently done under conditions of excessive heat. The ladle is first turned upside down to dump any liquid slag or metal. It is then turned right side up and when cool enough the men remove the sculls with bars and sledges. In the case of iron ladles this work is made easier by constructing the ladle with a large hole in the bottom, which is covered by an iron plate, over which the refractory clay for the bottom is laid. When a ladle is ready for patching or relining, this bottom plate, together with the clay bottom and any sculls, is pushed up through the ladle by a hydraulic jack.

*Ladle-oven fireman.*—Fires oven for drying ladles when ovens are not heated by gas or oil. Moderate manual labor, practically unskilled.

*Stopper maker.*—Makes stoppers for steel ladles. The stopper consists of a steel rod the height of the ladle inclosed in special hollow fire-brick cylinders, and on the lower end is a solid head usually made of a composition of graphite and fire clay and shaped to fit the nozzle. At the top the bar is bent to form a connection with the steel pourer's lever at the side of the ladle, by which it is raised and lowered, regulating the flow of steel. The stopper maker also removes the sleeves and heads from used stoppers, bends the rods to pattern, and puts on new fire-brick sleeves and head. The work is neither difficult nor heavy but requires some skill and experience.

*Car and crane greaser (Mill oiler, Mill greaser, Mold-car oiler).*—Oils and greases cranes, car shifters, ingot strippers, narrow-gauge buggies, and mold cars. Light work, unskilled.

*Mold-yard craneman (Mold craneman).*—Operates mold-yard cranes, for handling molds and cold ingots.

*Mold-yard man.*—Assists around mold-yard crane, unloads and changes molds and stools, and also breaks old molds into scrap size.

*Mold-yard scrapman.*—Cleans up and loads scrap in mold yard.

*Engineer, locomotive (Narrow-gauge engineer, dinkey engineer).*—Operates engine transferring ingot cars between converting and blooming mills.

*Switchman (Narrow-gauge switchman).*—Couples, uncouples, and throws switches.

*Tool keeper (Toolman).*—In charge of miscellaneous tools used in department.

## OPEN-HEARTH FURNACES.

### STOCKING, CHARGING, AND MELTING.

*Stock craneman.*—Operates small cranes of 5 tons or over capacity, handling melting stock (limestone, scrap, pig iron, etc.) for furnaces with crane, magnet, grab bucket, and chains. A great deal of the work is performed by lads of 16 to 20 years of age, since a bright mind and a supple body are great factors in learning to operate and in successfully operating the cranes.

*Stocker (Stock laborer, Stock unloader, Stock-house laborer, Scrap-yard laborer, Box loader).*—Unloads materials from cars and sorts and assembles different grades of scrap in piles; but principal duty is to load the materials for open-hearth melting (limestone, scrap, pig iron, etc.) into charging boxes. Unskilled work, varying in difficulty and severity with the individual plant. For the greater part, however, the employees may be regarded as selected common labor.

*Engineer, locomotive (Narrow-gauge engineer, Stock engineer, Ladle engineer, Dinkey engineer).*—Operates locomotives (standard or narrow gauge) used to distribute incoming stock, to transfer melting materials to furnace level, to shift ladle cars from blast furnace to mixer and mold cars from mold yard to pouring platform and thence to stripping cranes, and to haul the red-hot ingots to the blooming mill. The work requires very careful and watchful men, owing to the numerous tracks, crossovers, and short curves, and the many workmen moving about the yards.

*Fireman, locomotive.*—Fireman on locomotive. Usual duties.

*Switchman (Stock switchman, Narrow-gauge switchman, Ladle Switchman).*—Couples and uncouples cars and throws switches. Requires careful and watchful men for locomotive engineers. Unskilled labor.

*Mixer craniman.*—Operates crane that lifts ladle of molten metal from car to mixer and tilts the ladle to pour the metal into the mixer. The metal comes from the blast furnace and is stored in the mixer until desired for use in the open-hearth furnaces. A skilled craniman is required for the position.

*Mixer laborer.*—General unskilled labor work under mixer foreman.

*Mixer man (Mixer lever man).*—Operates mixer and handles metal from the time it is received in ladles until it is delivered into ladles for open hearth, including patching noses and ordinary repairs by regular crew. The work is light but requires an experienced employee.

*Mixer transfer-car operator.*—Operates car hauling metal from mixer to furnaces. The work is that of a low-grade motorman and is sometimes done by the charging-machine operator.

*Charging-machine operator.*—Operates the machine for charging materials into the furnace and for placing and removing the runner for pouring hot metal. The usual type of machine consists of an electrically propelled truck, moving on a track parallel with the furnace fronts, on which truck is mounted an electric carriage, moving to and from the furnaces. A large bar or ram projects on the furnace side and is provided with a specially shaped head, which engages in a groove at the end of the charging box. This bar can be moved back and forth, up and down, or made to revolve, so that with it the box is picked up, pushed through the open door of the furnace, and dumped. The machine is also used to shift the cars bearing the boxes to the point at which they will be used. The work requires considerable experience, good judgment, and great dexterity of hand, because there are as many as five levers or handles, each of which controls some separate movement of the machine. Furthermore, since a number of men necessarily work on and around the track upon which the charging machine operates, constant watchfulness is demanded.

*Hot-metal charger (Ladle-car operator).*—The ladle of hot metal from the blast furnace is placed on the charging car by a crane. The charging car is a small electric motor car with a trough at the forward end. The operator stands at the rear end, the ladle being in the center. The car is run to the furnace and the trough is pushed through the open door. The ladle is then tilted by the operator so that the metal pours into the trough and runs into the furnace. Very little skill or experience is required to operate the car, and the position may be compared to that of a low-grade motorman. Light work, with rest periods.

*Charging-floor craniman (Crane operator, Hot-metal crane operator).*—Operates hydraulic or electric crane to pour hot metal into furnaces and handles miscellaneous material on charging floor. An experienced crane operator is required for the position.

*Crane hooker (Hook-on, Hook-up, Box hookman).*—Hooks crane chains to ladles, charging boxes, and material to be moved. Unskilled, manual labor; exposed to danger from material falling from crane.

*Door operator (Door boy, Door puller).*—Operates levers which through electric or hydraulic connections open and close the doors of furnaces for charging or inspecting,

or for making bottoms. The work is light, unskilled, and is frequently performed by boys. Operators are usually stationed at a sufficient distance from the furnace not to be exposed to heat.

*Melter's helper, first.*—In direct charge, under the melter's orders, of the operation of a single furnace. The duties consist of: (1) Directing the charging of materials; (2) regulating the temperature of the furnace, which is done by reversing the gas and air in the regenerators at proper intervals (usually from 15 to 30 minutes), by regulating the flow of gas and air and by charging cold or molten material, as the case may be; (3) inspecting and testing "heat" (particularly by fracture tests) and, upon the melter's decision as to the indication of these tests, making the necessary additions of ore, flux, or recarburizer, as well as seeing that the melter's orders as to tapping are carried out; (4) "making bottoms" and repairing the hearth and lining of the furnace; (5) on Sundays, if the department operates only six days per week, "tending gas" and making minor repairs.

The position requires considerable practical metallurgical knowledge (to be acquired only through experience) combined with supervisory capacity and sufficient strength to stand hard work. The work of making bottoms and repairs on linings is particularly hard, not only because it is heavy work, in which the first helper does his full share, but because it is done directly in front of the furnace door in a very high temperature. Fortunately the work can be finished in from 15 to 30 minutes. In all the work assistance is furnished by the second helpers and the third helpers (cinder pitmen), and if necessary by men from other furnaces, this work being everywhere reciprocal. As the position leads to that of melter it is eagerly sought after.

*Melter's helper, second.*—Although in general an assistant to the first helper, the second helper has specific charge of the back (casting side) of single furnaces, and, assisted by the third helper (or by second helpers from other furnaces), performs the actual work of tapping. He dries the tapping hole and spout, drills out the magnesite clay with which the tapping holes are closed in stationary furnaces, or signals the first helpers to tilt the furnace, if of the tilting type; with a bar keeps the metal running freely and puts in the recarburizer as the metal runs into the ladle; is everywhere employed in making bottoms and other necessary furnace repairs.

The position requires experience and skill, but no great amount of technical knowledge. The work is hard and heavy, and, though the conditions under which it is done vary greatly, being much improved under the best modern conditions, these employees are still exposed to extremely high temperatures, though usually for short periods. The hazard of severe burns during the process of tapping always exists.

*Melter's helper, third (Cinder-pit man; Slagger; Cinder man).*—The organization and duties of this group differ rather widely in the various plants. For the majority, however, the duties may be said to consist in cleaning out the cinder pits and in cleaning up the slag, in helping to tap, and in shoveling the recarburizing materials, which have been assembled at the back of the furnace, into the ladles when the metal is run out; also to assist in "making bottoms." In some places the cinder work is done by pit laborers. This is unskilled work, in which considerable strength and endurance frequently are called for.

*Door and spout liner.*—Lines and repairs furnace doors, hot metal spouts, etc. Has doors ready in reserve. When door burns out, it is taken from furnace for repairs and new door put on. The work is usually done by skilled brick masons.

*Door and spout liner's helper.*—Assists the liner, and wheels necessary material.

#### CASTING.

*Ladle craneman (Pit craneman, Ladle crane operator).*—Operates the large cranes, varying in size from 75 to 200 tons capacity, used at back of furnace to handle the ladles of molten metal. The cranemen place the ladles in position to receive the hot

metal when the furnace is tapped and then, at direction of steel pourer, shift them from mold to mold. A great deal of the work is done under conditions of extreme heat and requires greater skill than that of any other cranemen. The work requires men who are quick to judge rightly and to act promptly in emergencies.

*Ladle man, first (Steel pourer, Ladle boss, Pit boss).*—Has charge of steel ladles, directs the placing of ladles for receiving heats, the setting of nozzles and stoppers, and sculling; is in charge of the pouring platform, and usually pours the first ingot, the remaining ingots being poured by the second ladle man. One of the most responsible positions on the casting floor. Moderately heavy labor, requiring an experienced man. The position is not without danger, and sometimes the ladle man is exposed to considerable heat.

*Ladle man, second, third, and fourth.*—The work of the second, third, and fourth ladle men is not clearly defined. As a rule, the second ladle man assists and works under the direction of the first ladle man and sometimes caps molds; the third ladle man sets ladle nozzles and cleans sculls from ladles; and the fourth ladle man sculls ladles. At some places, all work interchangeably. The work varies from light to moderately heavy labor, requiring little skill but some practical experience in some instances.

*Mold capper (Hot baller).*—Caps ingot molds after they are filled with hot metal. Usually done by one of the ladle men.

*Nozzle setter.*—Sets ladle nozzles when the work is not done by a ladle man. Light work, unskilled, but requiring man with practical experience.

*Stopper maker.*—(Same description as for Stopper maker, Bessemer converters).

*Ladle liner.*—(Same description as for Ladle liner, Bessemer converters).

*Test carrier.*—Carries test casts to laboratory for analysis. Light work, usually done by boys.

*Pit laborer (Slager).*—Cleans up slag and cinder from the pit behind the furnaces and in some places does the cinder work of the third melter's helper. Moderately heavy, unskilled, manual labor, with exposure to heat while working around hot ladles and hot slag.

*Mold-yard craneman.*—Operates crane-handling stools, molds, etc.

*Ingot stripper.*—(Same description as for Ingot stripper, Bessemer converters.)

*Ingot-stripper laborer.*—(Same description as for Ingot stripper laborer, Bessemer converters.)

*Molder.*—Makes steel castings for general use. Same kind of work as is done by a molder in a foundry.

### PUDDLING MILLS.

*Craneman.*—Operates electric magnet crane, unloading scrap from cars to stock piles. Work can be done by a man of ordinary intelligence.

*Stocker ( Yard man, Wheeler, Scrap man, Piler, Pig-iron wheeler).*—In some places scrap iron is unloaded from railroad cars by means of magnet cranes; in other places, the stockers do it by hand. They also load into wheelbarrows and take to the fagot makers or furnaces, scrap, pig iron, and ore. The work varies from light to heavy manual labor, depending upon the kind of scrap being handled. There is considerable danger of cutting the hands on sharp pieces of scrap and the hazard of material falling from the magnet cranes.

*Scrap shearman and scrap shearman's helper.*—Shears scrap material into short lengths for busheling furnaces and fagot makers. Manual labor, unskilled, but involving danger of cutting hands on scrap or in shears.

The helper brings scrap iron to the shears and shovels it back from shears for stockers to carry away. Moderately heavy manual labor, unskilled.

*Puddler (Boiler).*—Refines pig iron into wrought iron in a reverberatory furnace. The puddlers' work may be divided into five parts: First, lining the furnace with ore;



second, charging the furnace; third, working the metal during the boil; fourth, working the iron into balls; fifth, drawing and delivering the balls to the squeezer. A highly-skilled occupation, requiring considerable experience. The puddler's work is perhaps the hardest physical labor in the industry, and, moreover, the largest part of it is done under conditions of extreme heat. The work is intermittent in character, there being a rest period after each period of great exertion. The heat conditions are in many plants greatly moderated by the use of water-cooled furnace doors and fronts.

*Puddler's helper (Under hand).*—Assists the puddler in lining the furnace and in charging, working, and drawing the metal. In addition, fires the furnace, watches the product, and sees that the weight of the metal is properly recorded. The position requires less skill and carries with it less responsibility than the position held by the puddler, as all the work is done under the puddler's direction. It is also not quite so severe, because the puddler does the greater portion of the "rabbling" or working of the metal during the boil and also makes the balls. The general conditions of work, however, are much the same as for the puddler.

Frequently two puddlers work the same furnace and divide the pay evenly. This is known as working "level-handed." In this case the two men make an equal division of all the duties.

*Busheler (Scrapper).*—The duties are practically the same as those of the puddler, except that iron scrap is charged in the furnace instead of pig iron and that each heat requires a shorter time. The scrap is usually brought to the furnace by stockers, shoveled into a suspended charging scoop by the bushelers, and dumped into the furnace, although in many places it is shoveled directly into the furnace. All conditions of work are practically identical with those of the puddler.

*Busheler's helper (Scrapper's helper).*—Same general duties and conditions as described for puddler's helper. The busheler and helper usually work "level-handed" and employ a fireman to attend the furnace fire.

*Knobbler.*—Makes wrought iron by treatment of steel scrap in a knobbling furnace. These furnaces are comparatively small, being not over 4½ feet high. A furnace consists of a shallow hearth which may be water cooled; an arched cast-iron top so formed as to contain water; brick sides and back. Near the bottom of the hearth tuyères, two in number, enter, one from each side. Into the hearth is charged charcoal and soft steel scrap to a weight of about 300 pounds. Charcoal is used instead of coal or coke, because it is freer from impurities which would affect the quality of the iron. As the scrap softens it is constantly pried up and turned with a bar to allow the charcoal to roll down under it. When the steel melts, the blast from the tuyères acts upon the metal to oxidize and remove the carbon as in the Bessemer process. As the carbon burns out the melting point rises and the metal "comes to nature" as in puddling. The knobbler works the mass into a ball which is finally taken out with tongs and "shingled" under a hammer. Very often it is heated in a reheating furnace and hammered a second time before being rolled into bar. The material thus obtained is used in the manufacture of iron pipe and of iron sheets. It probably is more nearly pure iron than other ordinary product.

*Ash man.*—Cleans ashes from furnaces and loads them into wheelbarrows which he wheels to dump. Unskilled, manual labor.

*Engineer, stationary.*—Operates the engines driving the squeezer and the muck rolls. The work is that of an ordinary stationary engineer.

*Water tender.*—Tends water in boilers. The boilers are usually heated by waste heat from the puddling and busheling furnaces.

*Hammerman (Shingler).*—Where a hammer instead of a squeezer is used for making the bloom (shingling), the hammerman grasps the ball of metal with a pair of tongs and holds it under a steam hammer or a drop hammer, turning it over continually until it is shaped into a rough bloom. This term also applies to the hammerman who works

down, for rolling, piles made of muck bar. This is very heavy work done under conditions of extreme heat. During the hammering, sparks and pieces of scale fly widely, and to protect the eyes and face from these the hammerman usually wears a mask of iron wire.

*Squeezer man.*—Tends the rotary squeezer by which the liquid slag is squeezed out of the ball he is roughly shaping into a bloom for rolling. If the ball does not enter easily it is worked in gradually with a bar, and if the bloom does not come out easily from the squeezer, it is pried out with a bar. The work is performed in many plants by each puddler's helper in turn for the product of his own furnace. Hot and comparatively heavy work, but intermittent in character.

*Bloom boy (Bloom slinger, Bloom swinger, Buggy man).*—Takes the bloom from the squeezer to the rolls, using a pair of tongs suspended from an overhead trolley or an iron buggy. Hot and fairly heavy work but intermittent in character; always performed by men; involves some danger of burns from sparks as bloom passes through the rolls.

*Roller.*—In charge of the rolling crew rolling the wrought-iron blooms down into long, rough pieces known as "muck bar." The rolls are therefore known as muck rolls. The roller usually handles the iron at the rolls, doing exactly the same work as described for the "rougher down" in the bar mills. In some cases, the work is largely supervisory, the actual work being done by roughers, the roller setting the rolls and watching the product. A responsible position, requiring experience and skill. If the roller handles the bloom at the rolls, the conditions are the same as described for the rougher.

*Rougher and Catcher (Rougher-up and Rougher-down).*—The rougher and catcher pass the bloom back and forth through the rolls when delivered by the bloom boy. They are usually helped by hook-up when handling heavy blooms. The rougher works on the side next to the squeezer. Heavy work, involving exposure to heat and danger from flying sparks. (*See Rougher and catcher, Bar mills.*)

*Hook-up.*—Roughers, catchers, and finishers on the larger rolls are usually assisted by a hook-up who handles heavy material as it is being passed back and forth through the rolls. He uses a long bar, with a hook on one end and a handle on the other, which is suspended by a chain nearer the hook than the handle. The hook is placed underneath the billet to raise it, the bar acting as a lever with the chain as a fulcrum. The work requires some skill in handling heavy pieces, which is gained only by experience. The hook-up works near enough to the rolls to be exposed to the heat and flying sparks.

*Roll scale man.*—Cleans up and preserves the scale from the squeezer and the rolls, which is used by the puddlers. Comparatively light work, done with shovel and wheelbarrow by an unskilled workman.

*Hotbed man (Drag-out).*—Where the muck bar does not run to the hotbed on live rolls it is dragged there by the "drag-out" or "drag-down," who uses a pair of tongs. This is heavy work and hot. The "straightener" works on the hotbed, using a hook to arrange the bars as they come from the rolls and a wooden maul to straighten out curved places in the bars. The difficulty of the work varies according to the size of the material rolled. Unskilled, manual labor, exposed to heat.

*Fork man.*—Works on hotbed. Has long fork suspended by two chains on a trolley. As the bar comes from rolls to hotbed, the two fork handles are raised so that the tines go under the bar. The handles are then lowered and the fork is pushed across the hotbed to the shear side. Unskilled, light work.

Transfer chains on the hotbed do this work in the more modern mills.

*Shearman.*—Operates shears at end or side of hotbeds, cutting muck bar into lengths desired. The work is moderately heavy and requires but little skill or experience.

*Shearman's helper.*—Pulls bar across rolls to shears. Manual labor, requiring no skill.

*Shear laborers.*—After the muck bar is sheared into lengths it is piled on small cars by laborers and taken to the stock room. Unskilled, manual labor.

## CRUCIBLE FURNACES.

## MILLING.

*Stock laborer.*—Unloads iron muck bars and scrap from cars to stock pile. Moderately heavy, unskilled, manual labor.

*Shear laborer.*—Takes iron muck bars and scrap from stock pile, cuts into small pieces on alligator or rotary shears, or punch, and puts into stock bin. Moderately heavy manual labor, varying from unskilled to semiskilled, depending upon whether the laborer sets his own shears. Exposed to hazard of cutting fingers on scrap and in shears.

*Weigher (Weigher-up).*—Places small scoop on scales, shovels pieces of iron into it until it shows a certain weight, and then places on a pile to be used in filling pots. Unskilled, moderately heavy manual labor.

*Medicine man.*—Weighs charcoal, manganese, silicon, tungsten, and other materials put into crucible pots as alloys. The amount of each material to be put into a pot is ordered by the superintendent, so that the work, which is light, requires a careful man of ordinary intelligence.

*Melter.*—Has general charge of the crucible furnaces and melting crew; sees that the proper temperature is maintained, that the crucible pots are charged and drawn properly, and is generally responsible for the proper working of a furnace. The work is largely supervisory and requires a person with considerable practical knowledge, which can be acquired only by long experience.

*Shaker-in.*—When crucible pots are charged hot, the shaker-in fills the pots and carries them to the furnace on a truck. The pots are charged by the puller-out. Common labor, unskilled.

*Puller-out.*—Fills crucible pots with melting materials (iron and alloys), charges pots into furnace and draws pots when directed by melter. When pots are charged while hot, they are filled by the shaker-in. The furnaces open from the top and the pots are charged and drawn by special shaped tongs. This exposes the workman to a very high temperature and to the danger of burns if a pot breaks. In some places the pots are drawn mechanically, the puller-out merely steadying and guiding the pot. The work is highly skilled and done under conditions of great heat.

*Fluxer.*—Skims or swabs the scum or flux floating on top of the steel after the crucible pots have been drawn from the furnace. Hot work, unskilled, usually done by the molder.

*Teemer.*—The teemer lifts the crucible pots by means of a special shaped pair of tongs and pours the melted steel into molds to cool. In some places the contents of several pots are poured into a ladle and from the ladle into molds, to give a more uniform grade of steel. Mechanical pouring is in vogue at several establishments. In these places the pots are placed one at a time on a tilting device and poured by lever control. The teemer is a semiskilled employee who acts as an assistant to the melter when not pouring. Pouring is hot and heavy work.

*Pot boy.*—When pouring from crucibles is by mechanical means the pot boy operates a lever which tilts the crucible pot and pours the steel into the mold or ladle. Unskilled, light work, performed by boys.

*Molder.*—Prepares molds for pouring, removes ingots from molds after hardened, and assists the puller-out in filling crucible pots. The work is semiskilled and can be done only by men with practical experience.

*Chipper (Knocker-off).*—Chips or drills samples of steel from ingots for analysis, chips defective spots from ingots, and carries ingots to hammer shop. Moderate manual labor, semiskilled, requiring workman of ordinary intelligence.

*Ingot grader (Ingot inspector).*—Inspects fracture tests from ends of ingots after cooling and grades ingots. Light work, highly skilled and usually done by the foreman or superintendent.

**HAMMER SHOP.**

*Heater.*—Charges ingots into furnace, sees that they are heated properly, draws from furnace, and delivers small ingots to hammerman. On small furnaces firemen usually are not employed, in which case the heater shovels coal into the furnace. An important and responsible position, requiring practical knowledge of heating metal and involving considerable manual labor.

*Fireman.*—Shovels coal and tends fire of large heating furnace. Moderately heavy labor, unskilled.

*Craneman.*—Carries large ingots from furnace to hammer by means of a hand-operated crane, sometimes assists in holding the ingot under the hammer, and when hammered places ingot on stock pile. Manual labor requiring an employee with experience.

*Hammerman (4-ton hammer and over).*—On the large hammers the hammerman's work is largely supervisory, but the position requires a man with considerable skill and experience. The tongsmen usually handle the piece, assisted by the lever men, while the hammerman directs the work and sweeps scale from the ingot, although at times he handles the ingots at the hammer.

*Hammer driver.*—Operates lever which regulates the rise and fall of the hammer. The work is light, but requires a man of good judgment and of experience.

*Tongsmen.*—Shifts ingot under hammer, using tongs made for the purpose. The tongsmen usually work in pairs, one in front and one at the back of the hammer. Heavy manual labor, exposed to heat of ingot and flying scale. Tongsmen become very expert and skillful with experience and are promoted to the position of hammerman.

*Lever man (back and front).*—Uses a suspended hook or lever to assist in handling heavy ingots under the hammer. Heavy manual labor, requiring considerable skill and dexterity.

*Hammerman (over 1-ton to 4-ton hammer).*—Similar to hammerman on large hammers. Smaller pieces are handled and the hammerman usually does more of the actual work of handling ingots.

*Hammerman's helper (over 1-ton to 4-ton hammer).*—Assists the hammerman to hold and shift bars under hammer. Heavy manual labor at which the men become very adept and when experienced are promoted to position of hammerman.

*Peg boy (Pegger).*—Stands beside hammer and holds gauge block beside piece being hammered in order that hammerman may get desired size. Also sweeps scale from piece being hammered. Light work, unskilled, performed by boys.

*Chain boy.*—Controls chain which passes through block and is hooked onto piece being hammered, to keep piece level on die. Light, unskilled work, performed by boys.

*Hammerman (1-ton hammer and under) (Tilter).*—Holds bars under hammers and shapes as desired. In making octagon bars and small sizes the modern steam hammer strikes nearly 300 blows per minute. As the bars are finished on flat dies considerable skill is required to get the desired size, shape, and finish.

**ROLLING.**

The occupations in a crucible steel rolling mill are practically the same as in a bar mill, though the work is lighter and much slower, due to the fact that crucible ingots are small and very hard steel. (See Heater, Drag down, Roller, Rougher, Catcher, Strander, Finisher, and Straightener—Bar mill.)

**ANNEALING AND WAREHOUSE.**

*Annealer.*—Directs the charging, drawing, filling, and emptying of pipes in which crucible steel bars are annealed, sees that the pipes are properly sealed, and regulates the gas flow to maintain the proper temperature. The work is largely supervisory,

requiring a man with practical experience, and involving manual labor when the furnace is coke fired and no fireman is employed.

*Annealer fireman.*—When the annealing furnaces are heated by coke the fireman tends the furnace fires when such work is not done by the annealer. Moderately heavy unskilled manual labor.

*Annealer laborers.*—Crucible steel rods are put into pipes, with sand and lime, and then into the annealing furnace. The laborers fill the pipes, charge and draw them from furnaces, and empty pipes after annealed. Manual labor, unskilled, done under the supervision of the annealer.

*Stock inspector.*—Inspects surface of bar steel for size and surface defects and marks defects to be cut out by the cropper. A responsible position, requiring a skilled and experienced employee.

*Cropper and striker.*—Cut defects from finished bars. The cropper is a skilled man who knows grades and is able to tell when sufficient steel has been cut away. He supervises the work and holds the cold chisel for cutting, the sledge work being done by the striker, who is unskilled. Defects are sometimes cut from rolled steel bars by a shearman in the rolling mill.

*Laborer.*—Conveys steel on trucks from mills and hammers to stock room. Unskilled, manual labor.

*Bundlers.*—After steel is inspected and graded it is tied into bundles by the bundlers and carried on trucks to the stock room. Unskilled, manual labor.

## BLOOMING MILLS.

### CHARGING AND HEATING.

*Ingot stripper.*—(Same description as for Ingot stripper, Bessemer converter.)

*Heater.*—The heater is responsible for and directs the charging and drawing of the ingots by the pit cranemen and the maintenance of a proper temperature in the special type of furnace used for heating ingots, known as "soaking pits." Either the heater, or, under his direction, the helper attends to the reversing of the gas in the regenerative chambers. Frequent inspections (to an increasing extent pyrometric tests) are made of the temperature of the ingots in the separate pits, and on the basis of these inspections or tests the heater must so regulate the temperature of the pits that there will always be ingots at the proper temperature for rolling. In many plants heaters keep a record for each ingot of the time of charging and drawing and of the chamber in which it was placed, although in some plants clerks are supplied to do this work. The heater also supervises and at times assists in cleaning and repairing the pits and in preparing new bottoms.

A highly skilled and very responsible position. Since most of the decisions as to the temperature of the pits and ingots are made only on the heater's ability to judge by inspection—a knowledge which can be gained only by long practical experience—it is difficult to secure a good man for the position.

*Heater's helper.*—Reverses the gas in the regenerative chambers of the pits and, under the direction of the heater, regulates the temperature, changes the steel bits in the tongs of the pit crane, and in a few plants operates the nonautomatic pit-crane tongs, although in some plants this is done by men in a separate occupation (pit tongs-men), assists in repairs, and in general helps the heater in all his duties. In many plants the helpers perform work which is ordinarily given to separate occupations, such as making and repairing bottoms, tapping and cleaning out cinder, and opening and closing the pit covers. Where the work consists only in reversing the gas and assisting the heater in other ways, the work is not heavy or severe. Where, however, the duties of the specialized occupations are also embraced, all the conditions of work peculiar to those occupations are encountered.

*Bottom maker.*—Bottom makers make, level, and repair the coke-dust bottoms of the "soaking pits." This work is done by throwing in coke dust from the top of the

pits while there are no ingots in them and by working the coke into an approximately level condition with long iron bars. This is usually done while the pits are heated. When the bottom becomes too deep or contains much molten metal and scale, the bottom makers dig the bottom out, using a long iron bar with a sharp, flat head and a scraper for removing the cinder. The greater part of this work requires exposure to excessive heat, from which the men protect themselves by tying wet cloths over exposed parts and by wearing heavy shoes with soles of wood. The work is periodic in character, and the men thus obtain relief from time to time. The making of bottoms under these necessary conditions is very severe and by no means unskillful work. The wage is, however, proportioned much more to the difficulty and severity of the work than to the knowledge and skill required.

*Bottom maker's helper (Coke dust man).*—Wheels coke dust needed in making bottoms, brings necessary tools, and assists in doing the harder and more exposed work of bottom making. In some plants also performs the functions of a cinder man. The work resembles that done by the bottom maker, the chief difference being that the bottom maker is more highly skilled and supervises the work.

*Cinder man—(Cinder snapper, Cinder laborer).*—Taps the fluid slag and molten metal from the bottoms of soaking pits and wheels it to the cinder dump or to some point in the yard. Each chamber of the soaking pits is arranged so that it can be tapped separately by opening up the tap hole with an iron bar, very much as the cinder notch of a blast furnace is opened. The work is unskilled and not very heavy. In performing it, however, the men work in the cellars below the soaking pits proper, which are hot under any circumstances, and in which during the summer the heat is excessive. They are out of the cellars at intervals during the work, and thus obtain relief from the heat, as well as during the short rests which occur between jobs.

*Cover operator (Cover lever man, Cover man).*—Operates levers which, through electric, hydraulic, or mechanical means, open and close the heavy fire-brick covers over the soaking pits for the pit craneman when he is ready to charge or draw ingots, or for the heater or his helpers or for the bottom makers. In some cases the heater, heater's helper, or a bottom maker performs this function. The work is light and is frequently performed by boys or old men. In many plants the controlling levers are so far from the pits that no excessive heat is felt, but in a number the operators are exposed to excessive heat when actually at work. However, they usually arrange among themselves to have a good deal of spare time.

*Pit craneman (Charger, Drawer, Pit tongsman, Pit crane operator, Steel charger).*—Operates the crane used for charging the ingots into the soaking pits and for drawing them from the pits as directed by the heater and placing them either in the ingot car or on the roll table. In some places there are two cranes, one for charging and one for drawing. The position is one of excessive heat as well as of discomfort from the gas fumes, particularly during the summer, because of the necessary position which the craneman must occupy directly over the soaking pits. For this reason it is customary to provide spell hands for the position during the hot weather, and in some cases to shorten the working hours considerably. The position is particularly bad if the crane cab is fixed directly over the tongs, so that the craneman is exposed not only to the general heat from the pits but to the very much higher temperature that arises from the heated ingot and open pit. Much care has been taken in most plants to render the position more tolerable by an extensive use of asbestos and other nonconducting substances in the construction of the crane cab. In addition to its severity the occupation demands considerable skill to charge and draw ingots with the rapidity and accuracy required in the modern blooming mill.

*Ingot-car operator (Buggy operator, Ingot-buggy operator).*—Ingots are brought from the soaking pits to the rolls by either the pit crane or ingot car. Handling by crane frequently results in breakage or delays in putting the ingot in the right position for rolling. In some places the crane drops the ingot on a tilter, which is tipped over by

a manipulator boy by lever control, so that the ingot falls on the rolls. Ingot cars are usually electric buggies controlled from a distance by one of the heating or rolling crew. In some instances the operator rides on the car, which is so arranged that he is protected from flying scale when the ingot enters the rolls and to a large degree from the heat of the ingot. Nevertheless, the position is uncomfortably hot in summer, and little rest is afforded unless spell hands are employed, which is a common practice during hot weather. The work is comparatively simple, as the car is operated by a single controller handle and is self-dumping, or has one lever for tilting the ingot forward onto the rolls.

#### ROLLING, SHEARING, SAWING, ETC.

*Roller.*—The nature and the difficulties of a roller's duties vary widely with the different types of mills. In all places he has charge of the rolling crew and is responsible for the output. Usually he operates the rolls, but in some instances only supervises the rolling. In reversing blooming mills he operates the levers by which the distance between the rolls is regulated and usually the levers controlling the direction and speed of rotation of the live rollers of the table. On three-high mills, when the distance between the rolls is fixed, the roller operates the apparatus tilting or lifting the table for raising the ingot from the lower to the upper pass and also the levers controlling the live rollers of the table. The roller's position is one requiring considerable skill and long experience, although the product of the blooming mill is an unfinished article. He is not valued so much for his services in tending the rolls while everything is going right, however, as for his knowledge of what to do when there is trouble. In a mill where an ingot is being handled every minute or two, and there are at times two ingots on the table at once, unremitting attention is required. In the case of a mill delay, as when there is no hot steel, he may rest or he may have to work hard at repairing some broken part.

*Roll engineer.*—The duties really fall into two distinct classes: (1) Engineers on reversing engines for two-high mills. In this case they not only must keep the engine in good running order and see to repairs (in which they are usually aided by assistants), but must occupy a position in the roller's platform or "pulpit" alongside the rolls and with levers connected with the engine throttle reverse the direction of the engine after every passage of the ingot through the rolls. (2) Engineers on nonreversing engines for three-high mills. In this case they simply act as ordinary stationary engineers, maintaining the engine at proper speed and keeping it in good running order. They must be on hand at all times to stop and start the engine at the roller's signal. The engineer on reversing engines must be an engineer of high grade and capable of quick decision and action in emergencies. He occupies a position which requires constant attention and which in summer is exposed to considerable heat. The engineer on nonreversing engines is usually a considerable distance from the heat of the rolls and is unoccupied while awaiting the roller's signals.

*Manipulator.*—Operates levers controlling a device by which ingots can be turned over or reversed or by which the ingot or bloom can be shifted laterally from one pass of the rolls to another. The work is much more skilled and requires longer experience than any description would indicate. The men become wonderfully expert in using the manipulators, and it is upon the quickness with which the operation of turning and shifting the ingot can be performed that the production of the mill largely depends. The manipulator assists in all roll changes and repairs not performed by millwrights.

*Table man (Wrench man, Rougher, Assistant guide tender, Steerer).*—Works alongside or, in a few cases, on the tables of the blooming mill and with long iron hooks guides the ingot or bloom into the right pass, or with a heavy iron tool with a square fork at the end which fits over a bloom, turns the bloom over when it is too small to be handled by the manipulator. In a few cases, using a similar tool with a fork large enough to fit an ingot, he performs the functions described above for the

manipulator. In some cases he operates an approach table or some form of conveyor or transfer in addition to the duties described above. In mills equipped with the best types of manipulators, the table man's services are required only from time to time, when the piece becomes unmanageable, and in this case the position is relieved of its worst conditions. Where it is necessary for table men to do all or the greater part of the work of handling the ingot or bloom, the position, even when frequently relieved by spell hands, is one of the most severe in the industry, because of the arduousness of the work and the exposure to heat. There is also danger of serious injury to the eyes as well as of minor burns from flying metal which is driven back with considerable force when the ingot enters the rolls.

*Back lever man.*—Operates levers controlling table back of rolls.

*Conveyor man (Transfer lever man, Steel loader, Push-off operator).*—Operates levers which control the various conveyors used in transferring ingots from the soaking pit to the rolls, or blooms from the rolls to the hotbeds and shears, and from there to the shipping department or to other mills. These conveyors are usually motor driven and generally consist of a long table, with mechanically driven rollers (live rolls) on which the ingot or bloom rests and by which it can be shifted forward or backward by rotating the rolls in one direction or the other. Also operates conveyors disposing of crops and butts. These conveyors are usually continuous and in charge of an unskilled laborer. At the side of the tables are plate guards, which prevent the piece from falling off the table. Comparatively little skill, but constant attention, is required and, in a few cases, the work is done under conditions of extreme heat. The ordinary duties do not require any heavy manual labor, but when there is any trouble the conveyor men have to work very hard for a short time.

*Greaser (Roll greaser).*—Greases the roll bearings and mill-table gears and bearings, and oils the cranes, where this is not done by the craneman. The occupation is distinct from that of engine oiler and wiper. Low grade, unskilled, light work. When the mills are properly protected the occupation carries with it little hazard.

*Oiler and wiper (Roll engineer's helper).*—Assists roll engineer and oils and wipes engine. Light work, unskilled. Learns work of engineer.

*Roll scale man (Scale wheeler).*—Shovels out the scale which accumulates under the tables and in the "scale pits" under the rolls. This is wheeled away and used in the blast furnace or the open hearth. Also cleans up the mill and handles scrap. Light, unskilled work.

*Shear and table engineer.*—Operates shear engine and looks after table engine, including oiling. Low-grade stationary engineer, usually trained in the mill to do the work, which is light.

*Shear-table man.*—Operates shear tables, clutch, gauge, pushers, and slab jack by means of levers. Light work, requiring but little skill.

*Shearman.*—Operates large shears by which the end of the partially rolled ingot containing the "pipe" (a cavity formed in the molten metal by the gases contained in the metal) is removed; shears the ingot when rolled down to size into shorter pieces called "blooms" or "billets," according to their size and length, for use in the smaller rolling mills; supervises the entire shearing crew; and is responsible for keeping the shears and shear tables in proper working order. In many plants assists in roll changes. The work ordinarily falls into two parts: First, operating the roller table by which the piece is carried under the shears; and, second, setting the gauge which fixes the length of the piece and operating the lever controlling the mechanism (hydraulic, electric, or steam) by which the shear is made to cut the bloom or ingot. The operation does not require a great amount of skill, but the position is one of some responsibility, particularly in shearing crop ends so as to secure the maximum of good steel from each ingot rolled.



*Shearman's helper* (*Crop puller, Butt puller, Push-off operator, Kick-off boy*).—Shear-men's helpers comprise two different classes: (1) Those who operate levers by which the gauge or stop against which the end of the bloom strikes regulates the length, or levers for operating the kick-off, a contrivance for knocking the sheared ends (crop ends or bloom butts) off the shear table, or levers controlling the tables which carry the bloom away from the shears; (2) unskilled men who drag the hot bloom butts or crop ends away from the shears with tongs and do any of the other required unskilled work around the shears. The various lever men are not highly skilled, but their work requires very constant attention, and they may be regarded generally as in training for positions as shear-men. The unskilled work is not very heavy, because the crop ends are comparatively small, but it is rather hot work, particularly in summer, when the iron plates over which they drag the red-hot bloom ends become excessively hot. As a protection, heavy shoes with wooden or rubber belting soles are usually worn.

*Scrap man*.—When the scrap ends are not disposed of mechanically, the scrap man loads them on cars or into pans to be carried away by locomotive or crane. Heavy, unskilled, manual labor.

*Loader and stocker* (*Hooker-on, Stocker, Loader*).—When the blooms leave the shears and hotbeds, they pass either directly to another mill or are loaded into cars for shipment or are piled in the yards until needed. In any case, the loaders and stockers handle them, loading and straightening them in the cars or piling them in the yards. Heavy, unskilled work. There are usually times for rest during mill delays, and the work is therefore relieved of much of its arduousness. The chief hazard involved in the occupation is from the fall of improperly piled blooms and from the overhead cranes largely used in handling the material.

*Craneman* (*Mill craneman*).—Cranemen operate the various cranes (except pit-cranes) used in the mill for handling rolls, defective metal, etc., as well as those in the shipping department (except locomotive cranes). These cranes are almost without exception electric cranes of relatively small capacity, and many of those in the shipping department are equipped with magnets. The handling of these smaller cranes does not require a great deal of skill or very long experience. Many of them are in fact operated by boys after a few days' training. None of these cranes, except those in the shipping department, work very steadily, being used only when needed. The cranemen are in their cabs, however, the greater part of the time. With properly equipped cranes the hazards of the occupation—falls, electric burns, and shocks, and danger of being run over by the crane or caught in the gears—are practically eliminated.

*Crane hooker* (*Crane follower, Hooker-on, Hook-up*).—Assists craneman in hooking on to load. Signals craneman and hooks and unhooks crane chains to material to be moved. Moderate, unskilled, manual labor.

*Steel chipper*.—Chips defects or slivers from steel, using a pneumatic chipper. Light work, requiring little skill.

*Stamper* (*Marker*).—Stamps heat numbers, weights, etc., on the sheared blooms, billets, or slabs. For this purpose he uses a heavy hammer with the proper die sunk in its head or a die which is struck with a sledge. The striking is frequently done by one of the shearman's helpers. The work is a little higher grade than unskilled, but requires no heavy manual labor. Although the workman stamps the blooms while they are still red hot, he can usually protect himself from exposure to extreme heat, and the job is consequently not very severe. In some plants a marker is employed, who paints weights, etc., on the blooms.

*Toolman*.—Carries supplies for mill, tools, etc.

*Water carrier*.—Carries drinking water.

## PLATE MILLS.

## CHARGING AND HEATING.

*Slab yard crane man.*—Operates crane carrying slabs from storage yard to furnace and placing them on skids for feeding into furnace.

*Crane hooker (Crane follower).*—Guides magnet crane or hooks crane cables to slabs in yard and unhooks when delivered to furnace; in some places straightens slabs on skids in front of furnace. Semiskilled manual labor.

*Charging crane man and Charging-machine operator (Charger).*—Operates levers controlling the various types of charging cranes and machines used for placing slabs in the furnace and removing them when properly heated. The most common type consists of an overhead crane with a suspended revolving carriage on which is mounted a long arm with a special grip for holding the slab. The arm is hooked at the end so that it will fit over one end of a slab, the other end being held by a block controlled by the machine operator, which pushes the slab tightly into the hook. The whole arrangement is very much like hooking the bent forefinger over a slab and then holding it in place with the thumb. In charging, the arm is swung over the trucks on which the slabs are brought from the slab mill, the arm is lowered and the hook at the end caught over the end of a slab, the bar carrying the holding block is then shoved up against the other end of the slab, which is then lifted and swung around in front of the proper furnace door. The furnace door is opened and the whole suspended carriage moves forward until the arm is well inside the furnace, the holding block is released, and the slab left on the floor of the furnace. Other types of charging machines are much like those described for the open hearth. The character of the work and the amount of skill and experience required vary widely according to the type of charging machine, as well as the kind of furnace used. In the majority of cases, the work requires a good deal of skill, as there are many levers to be controlled and the work must be done rapidly.

*Furnace lever man (Transfer lever man).*—In some mills the slabs are placed on skids in front of the furnace and pushed into the furnace by a hydraulic pusher. Such furnaces are usually "continuous," being so arranged that when a slab is pushed into the furnace a heated slab drops from the opposite side of the furnace upon the transfer table and is carried to the rolls. The furnace lever man operates the levers controlling the furnace transfer table and the pusher for charging slabs. Light, unskilled labor, requiring some experience.

*Ash man.*—Removes ashes from heating furnaces and takes them away in wheelbarrow. Common, unskilled labor; light work.

*Cinder man (Cinder snapper, Cinder monkey).*—Taps out the cinder which collects at the bottom of the furnace and takes it away in a cinder buggy or wheelbarrow. This cinder contains a high percentage of iron, and is consequently cast into convenient shapes to be used in the open-hearth or blast furnaces. Unskilled work. Very little heavy manual labor, and the exposure to heat does not last long.

*Fireman.*—Shovels coal into furnace to maintain proper heat. Heavy manual labor, with exposure to heat, and requiring some experience.

Many of the furnaces are gas heated, making the services of a fireman unnecessary.

*Heater.*—In charge of the furnaces for reheating slabs. Duties are to maintain the proper temperature within the furnaces and to direct the charging and drawing of the slabs. As a rule, the furnaces are not "continuous," the slabs being charged and drawn at the same end of the furnace. A highly skilled occupation, requiring long experience and considerable practical knowledge of the heat treatment of metals.

*Heater's helper.*—Assists the heater in all his duties. The number of helpers employed and functions performed by them depend largely on the type of furnace and whether they perform any duties, such as charging slabs, usually performed by men in separate occupations. They repair bottoms in case cinder or sand bottomed fur-

naces are used, and also assist in making other repairs. Heaters' helpers frequently operate the conveyor which carries the slabs to the rolls. The work is very diversified, requiring in part highly skilled men and in part relatively unskilled men. Where a heater has a large number of furnaces under his direction, his first helpers are highly skilled men, capable of looking after all the details for the separate furnaces.

*Door operator.*—Raises and lowers the doors of the furnace for charging and drawing and for the heater's inspection. The doors are usually counterweighted so that they can be operated by pulley. Light work, usually done by boys. The conditions are analogous to those of the door operator in the open hearth, except that the operator is usually much nearer the furnace.

#### ROLLING AND SHEARING.

*Roll engineer (Hot engineer).*—(Same description as for Roll engineer, Blooming mills).

Very few of the plate mills in this country are reversing, the majority being "three high." Same general conditions as in blooming mills.

*Greaser.*—Greases roll train, tables, etc. Unskilled, light labor.

*Roller, sheared-plate mills.*—Supervises and directs the entire process of rolling and the changing of rolls. Is responsible for the condition of the plate as it leaves the rolls. In order to give the plate the proper width, the roller takes advantage of the fact that plate when rolled lengthens considerably in the direction of rolling, but does not widen to any appreciable extent at each pass. The slab is accordingly delivered on the roll table with the long side of the rectangle leading, and is given enough passes in this direction to extend the plate to almost the width desired. The roller gauges it after each pass with a long bar, which has a slidable marker mounted on it. When it reaches the proper dimension in the direction of the rolling, the roller orders the "hookers" to give the slab a quarter turn, which brings the short side first, and the piece is then rolled back and forth until it is rolled down to the exact width and thickness required. During this period the roller gauges the thickness of the plate frequently with a micrometer gauge. The roller, during the course of rolling, indicates to the screw man how much nearer the rolls should be brought together. This is a very responsible and highly skilled occupation, requiring a special knowledge of the working of iron and steel that can be gained only by long experience. It is impossible to convey in a description the kind and degree of knowledge required to produce uniform plates of the proper width and thickness, on which the loss shall be as little as possible. The roller must be able to direct the heater when the slabs are not heated properly.

*Roller, universal mills.*—Duties and responsibilities are the same as for sheared-plate mills, the only difference being that the plate, instead of being turned in order to give the proper width, is rolled straight through with the same end first, the width being determined by the side rolls. Nature of work is same as for rollers in sheared-plate mills.

*Screw man (Screw-down).*—Operates levers or wheel controlling hydraulic or electric mechanism actuating the screw by which the distance between the rolls is regulated. This mechanism is connected with a dial on which the distance between the rolls is indicated automatically. This is responsible work, requiring considerable experience. The screw man is signaled by the roller from time to time at what distance to keep the rolls, but the screw man is responsible for making the proper changes. His position is in a "pulpit" not far from the rolls.

On universal mills there is also a screw man for the side rolls whose duties are similar, but easier.

*Manipulator, sheared-plate mills.*—(Same description as for Manipulator, Blooming mills).

*Table operator.*—Operates levers which lift tables in front and behind rolls, and controls live rolls. The operator is stationed in a "pulpit" some distance from the rolls and the heat of the material being rolled. The work is light, but requires a man of skill and experience.

*Table man (Hooker, Hook man).*—The duties resemble very closely those of the table man in blooming mills. They turn the slabs around when ordered by the roller and generally assist the manipulator. In many cases they perform the duties of the scalers, as described below under "Roll hands." They also frequently regulate the flow of water on the rolls, and where scale is removed by a steam blast, regulate the blast. The conditions of work are analogous to those of the table man in blooming mills.

*Roll hands (Scalers).*—Includes miscellaneous men required by the local conditions as well as the rather definite occupation of "scalers," whose duty is to remove the scale formed on the slab, so as to give a polished, smooth surface to the finished plate. This is done by several methods, which may be performed by the same man or separate occupations may be carried, the principal ones being (a) salter, who throws salt on the slab, and (b) sweeper-off, who uses a heavy wire brush and rubs the scale off. The nature of the work and the skill required vary considerably, according to the exact duties performed.

*Roll scale man.*—Removes scale from under and around the rolls and does general cleaning about the mill. In some places, the work is done by laborers on Sundays and when the mill is shut down. Light, unskilled, manual labor.

*Straightener (Cold-roll operator, Roller leveler).*—Operates levers controlling the straightening machine. This machine consists of two sets of rolls, the upper set being placed so that the axis of each of its rolls is just above the line between a pair of the lower rolls. The position is like that given by placing the fingers of one hand on top of those of the other, so that the first finger of the upper hand rests on top and between the first and second fingers of the lower hand. The lower surface of the upper set is just enough below the upper surface of the lower set to create a pressure which will smooth out wrinkles or bulges that may have formed in the plate while it was cooling. Not very difficult nor highly skilled work. For some of the narrow plate, where less care is required, the position is filled by boys.

*Gauger.*—Inspects and gauges the plate, as it cools on the roller table, more carefully than the roller is able to do, or is employed on tandem and other plate mills of the same kind to gauge the plate between different passes. The work requires some judgment and considerable training. It is not heavy, nor is there much exposure to heat.

*Hotbed lever man (Transfer man, Train operator).*—Operates levers that control transfer tables which carry plates from rolls, and the mechanical devices for transferring them from the tables to the casters in front of shears. Light manual labor, requiring but little skill or experience.

*Hotbed man.*—Handles product on hotbed. Moderately heavy, unskilled manual labor.

*Greaser, hotbed.*—Greases and oils hotbed and finishing machinery. Light manual labor, unskilled.

*Marker.*—Marks plate with chalk to indicate where ends and sides are to be sheared and the lengths into which it is to be cut. The work is light, but requires a man with experience and good judgment to get the greatest amount of salable plate out of the material.

*Line boy (Square-up).*—Chalks line used by marker and helps draw line across end of plate. Light work; performed by boy.

*Layer-out.*—After plates have been squared up the layer-out marks them for shearing into special shapes and sizes, boiler heads, etc. Light work, similar to that of the marker.

*Painter*.—Paints order numbers, weights, etc., on plates. Light work, unskilled.

*Stamper*.—Stamps heat numbers, weights, etc., on plates, using hand dies and a hammer. Light manual labor.

*Shearman*.—In the mills for sheared plates there are usually two sets of shears—one for “end shearing,” in which the long piece of plate, as it comes from the rolls, is cut across at the proper point; the other, for “side shearing,” which takes the pieces as they come from the end shears and cuts them along the lines marked by the layer out. Usually the plate is run out from the roller conveyor onto large “casters,” which may be turned in any direction, set on top of bars of equal length, fixed in the floor. The plate is moved along these casters, the shearman at one of the forward corners and the leader at the other, the plate being pushed by the shearman’s helpers, who hold it with “dogs” (short iron bars with a slot in the end of each which fits over the edge of the plate). The shearman brings directly under the knife the line marked for shearing and the leader brings his corner to the proper point. Then, at a signal from the shearman, the shear-lever man brings down the shear knife. The shearman is responsible for the condition of his shears and supervises the work of the entire shearing crew. The position requires considerable experience and a very accurate judgment. The responsibility is considerable, as by the slightest error the shearman may spoil a valuable plate. The work is comparatively heavy and is usually done by men of good physique.

*Shearman’s helper (Shear laborer)*.—Includes three grades of helpers: (a) “Leaders,” who guide the plate on the casters and “line it up” at the mark where it is to be cut; (b) “shear-lever men,” who, at the direction of the shearman, pull the lever which operates the knife; (c) “shear laborers,” who, as described above, pull the plate along on the casters and assist in handling the sheared plates. There are also “scrap men,” who clean up the pieces of scrap made in shearing. The leaders are highly skilled men, who may be considered as being in training for the position of shearman. Except that they do not have the responsibility and supervisory duties, their work is of the same character as that of the shearman. The work of the other helpers is not heavy and requires very little skill or experience.

*Rotary shearman*.—In some places the plate is carried on conveyor rolls between two rotary shears, which shear the plate on each side on the lines made by the marker. The shearman operates levers controlling the shears and also the conveyor rolls on which the plate is carried. Rotary shears are used, also, to shear along curved lines and patterns for special shapes. In making boiler heads and circular shapes the plates are roughed out on the squaring shears and taken to the rotary shears by a crane. A plate is fastened to a standard which rotates in such a manner as to bring the edge of the plate in contact with the rotary shears.

*Rotary shearman’s helper*.—When shearing the side of a plate, the helper sets the shears to cut at the point indicated by the layer-out and a shear laborer clamps the plate with a holder to make it travel in a straight line. On other work he assists in handling the plates and picks up scrap. Moderately heavy manual labor, unskilled.

*Scrap shearman*.—Operates shears cutting up into scrap lengths pieces sheared from plates. Moderately heavy labor, unskilled.

*Engineer, shear and table*.—Operates shear and table engines. Duties of a stationary engineer.

*Craneman*.—Operates the cranes other than those used for charging and drawing furnaces. The cranes are chiefly electric and of small capacity. A large number of them are used in handling plates for shipping, etc.

*Crane hooker*.—Signals craneman and fastens crane hooks to material to be moved and unfastens them. Light labor, semiskilled.

*Product-crew man (Stock laborer)*.—Handles product from shears to shipping beds. Manual labor, light to heavy, unskilled.

*Water carrier*.—Carries drinking water and keeps ice and water in barrels.

## STANDARD RAIL MILLS.

## CHARGING AND HEATING.

*Engineer, locomotive (Narrow-gauge engineer, Dinky engineer).*—Runs locomotive carrying blooms from blooming mill to rail mill. Compares with freight-yard engineer.

*Fireman, locomotive.*—Usual duties of a locomotive fireman.

*Switchman.*—Couples and uncouples cars, throws switches, signals engineer, and performs the other duties which pertain to the position.

*Craneman (Cold-steel man).*—Operates crane conveying steel from blooming mill to furnaces.

*Crane hooker (Crane-tongs man, Hook up).*—Signals craneman and hooks chains to blooms to be moved. Semiskilled, light manual labor.

*Bloom-yard laborer.*—General labor around bloom yard, assisting in making up heats, unloading steel, etc. Unskilled, manual labor.

*Bloom-conveyor operator.*—When blooms are brought to rail mill from blooming mill over a conveyor, operates levers which control movement of conveyor. Light work, unskilled.

*Bloom push-over.*—Operates electric pusher that pushes blooms off conveyor from bloom mill or yard to furnace run. Light lever work, unskilled, done by boys.

*Charging-machine operator (Charger, Pit craneman, Charging craneman, Drawer).*—Charges blooms into reheating furnace, using various types of charging machines. One of the commoner machines in use grips the bloom at one end, swings it around from the conveyor, and pushes it into the furnace. The same machine draws the heated bloom and places it in the conveyor leading to the rolls. (See Charging-machine operator, Plate mills.)

*Reheater (Heater).*—In charge of reheating furnaces, which are necessary when the blooms are not rolled directly from the blooming mill. Duties are to adjust air and gas so as to maintain the proper temperature within the furnaces, to keep furnace bottoms in good condition, and to direct the charging and drawing of the blooms. Requires considerable knowledge of the heat treatment of metals, but not so much skill and experience as for soaking-pit heaters. (See Heaters, Blooming mills.)

*Reheater's helper (Heater's helper, Assistant heater).*—Assists the reheater in all his duties. The number of helpers employed and functions performed by them depend largely on the type of furnace. Where a reheater has a large number of furnaces under his direction, his first helpers are capable of looking after all the details for the separate furnaces.

*Pusher man.*—When cold blooms are used they are first heated in a preheating furnace before going to the regular furnace. This furnace is "continuous" and the pusher man operates levers that causes the electric pusher to push the blooms from the furnace skids into the furnace and from the furnace to the regular heating furnace.

*Door opener (Cover operator, Door operator, Furnace-door man).*—(Same description as for Cover operator, Blooming mills.)

*Bottom maker.*—(Same description as for Bottom maker, Blooming mills.)

*Bottom maker's helper and laborer.*—(Same description as for Bottom maker's helper, Blooming mills.)

*Cinder man.*—Breaks up cinder and loads same on cars, brings in coal for heaters, and taps and removes cinder from pits. Moderate, unskilled, manual labor.

*Furnace run operator (Manipulator).*—Operates lever which controls conveyor rolls that bring blooms from furnace to roughing rolls. Light work, unskilled.

*Ingot-car operator (Ingot-buggy operator, Buggy operator).*—(Same description as for Ingot-car operator, Blooming mills.)

## ROLLING AND SAWING.

*Roller.*—The roller's duties are almost entirely supervisory; that is, he does not control the operation of a set of rolls as in blooming mills. He is in general charge of

the rolling and of all roll changes and makes frequent inspections to see that everything is going right; has the product gauged frequently to see that the section is rolled true to size, and if it is off he sees that the necessary changes are made to line the mill up properly. The roller is valued chiefly for his practical knowledge of the mechanical working of steel and for his ability to set up and maintain his mill in proper running order. The position demands a high degree of skill and knowledge.

*Roller's helper (Assistant roller, Roll hand).*—The roller's duties are so varied, and the area covered by the modern rail mill is so large, that he is, in the majority of plants, given one or more assistants, who watch various parts of the particular processes and assist the roller generally in all the work. These men are in line for promotion to the position of roller. The roller's helpers often spell others of the rolling crew, and in some places do the work of the guide setters. The nature of the helper's work depends entirely on the duties assigned by the roller and on the work of the person he is set to spell.

*Guide setter (Guide man, Finishing guide man).*—Sets in place on the various stands of rolls the iron guides by which the partly finished rail is made to enter the "pass" between the rolls at the proper angle, and inspects them to see that they are kept in proper position. Assists the rollers in roll changes. The work requires a high degree of mechanical skill and a great deal of practical experience. The guides frequently need adjusting while the rolls are still hot.

*Roll engineer (Bloom engineer, Roughing engineer, Finishing engineer).*—Operates both "reversing" and "nonreversing" engines. (See Roll engineer, Blooming mills.)

*Roll engineer's helper (Assistant engineer).*—Oils and wipes engines and learns the work of the roll engineer.

*Motor-house tender (Roll motorman).*—Where electric instead of steam power is used for rolls, conveyors, etc., the motor-house tender has charge of the electric motors. A skilled electrician.

*Table lever man (Bloom lever man, Catcher, Rougher, Roughing lever man, Table engineer, Manipulator, Finishing lever man, Iron man).*—Operates the tables, raising and lowering the blooms for the rolls, and the various forms of manipulators used in turning the pieces so that they will enter the passes properly. The rails must enter the rolls much more exactly than in the case of blooming mills, and this position, therefore, requires more highly skilled men. (See Manipulators, Blooming mills.)

*Table man (Barman).*—(See Table man, Blooming mills.)

*Transfer man.*—Operates levers controlling tables that transfer blooms from first to second roughing rolls and from second roughing rolls to finishing rolls, etc. Light work, unskilled, but requiring some experience.

*Mill greaser (Greaser, Table oiler, Roll-train greaser, Mill oiler).*—Greases roll trains and oils roll tables. Light work, unskilled.

*Condenser pump engineer (Pump man).*—Attends condenser pumps for rail mill and blooming mill. Low-grade stationary engineer.

*Roll scaleman.*—Cleans scale from under rolls, wheels it away, and keeps mill clean. Unskilled, light work.

*Hot-saw man (Hot-saw lever man, Sawyer, Hot-saw operator).*—Operates levers controlling the circular saw by which the rails are sawed after they leave the finishing pass. The saw man sees that the gauges are properly set, and if a "gang saw" (i. e., one in which two or more saws set apart the length of a rail are made to cut simultaneously) is used, the saw man must see that the saws are properly set. The work does not require a great deal of experience.

*Gauger.*—Operates levers which drop stops to put the rail in proper position for sawing, and helps change saws. Light work, semiskilled.

*Butt puller (Crop-end man, Scrap man).*—Drags away short ends of sawed off rails or operates the conveyor that carries them away. Unskilled, heavy, manual labor, except where conveyor is used.

*Hot-saw engineer.*—Operates engines for hot saws, oils saws, and takes care of belts. A stationary engineer.

*Stamper (Rotary stamper).*—Has charge of automatic machine that stamps heat numbers on rails. The machine consists of a wheel in which steel numbers are set, which must be changed to correspond with each heat number from which a rail is made. Changes are signaled from the heating pit. Light work, semiclerical.

*Letter stamper.*—Stamps letters on rails by means of a heavy hammer with a die in its head. Light work, unskilled, with some exposure to heat.

*Curver (Cambering-machine operator).*—Has charge of cambering machine through which the hot rail passes before going to the hotbed, to give it a bend that straightens while the rail is cooling. Light work, unskilled.

*Hotbed lever man (Jack operator, Hotbed operator, Friction-roll operator).*—Operates levers controlling various forms of transfers by which rails are carried along on hotbeds. Light work, a little better than unskilled, and requiring comparatively little experience.

*Hotbed man (Hot straightener).*—Greases the tops of the rails which make up the hotbed, and turns the rails over from time to time so that they will cool evenly, and thus be as straight as possible when cool. In turning the rails a tool called a "dog" is used, which is very much like a large wrench. In some establishments, two occupations are found, hotbed greaser and rail turner. Unskilled, but very heavy manual labor, and exposed to considerable heat.

*Hotbed inspector (Section inspector).*—In charge of hotbeds, hot saws, and cambering machine, and weighs hot rails; inspects rails on hotbeds for mechanical defects. Duties confined to inspecting in some establishments, the other work being in charge of a hotbed foreman.

*Mill craneman (Crane operator).*—Operates electric cranes for general work and making roll changes. An experienced operator is required.

*Roll setter.*—Builds up and adjusts rolls. A skilled position, involving some heavy manual labor.

#### FINISHING, ETC.

*Transfer lever man (Roller-line operator).*—Operates levers that control roller conveyors carrying rails from hotbeds to the finishing sheds or from the finishing sheds to the shipping yard. Light work, semiskilled.

*Transfer-car man (Hotbed transfer operator).*—Operates transfer car delivering rails from hotbeds to the hand or automatic press beds. A low-grade motorman.

*Bed puller (Bed pusher, Laborers).*—Pulls rails along skids between conveyor rolls and chippers and straighteners. In some places, uses small air hoists to handle rails. Unskilled, heavy manual labor.

*Throw-off (Rail dumper).*—In some places, rails are moved from the conveyors to the straighteners or cold saws by hydraulic pushing arms operated by the throw-off. The work is done by lever control, is light and requires but little skill or experience.

*Chipper (Burr filer).*—With a cold chisel and hammer removes the burr left on the ends of the rail when it is sawed. In some cases, a pneumatic chipping tool is used. Also removes any small flaws, left in rolling, that do not go below the surface. Light work, requiring some skill and experience.

*Straightener, gag press.*—The "gag press" is a machine having a bed into which rollers are set so that the rail can be easily pushed along over it. Above this bed is the press proper, which is so arranged that it can be brought down by the operator (called gagger) to any required distance, generally by the pressure of his foot on a pedal. In straightening rails the straightener, assisted by one of his helpers, swings the rails onto the bed. The straightener then sights along the head of the rail from one end toward a light (very much like an engine headlight) at the other end of the rail. Any bend in the rail is readily detected, and the straightener moves the rail along over the bed until the center of the curve is directly under the press. He then signals the



**gagger**, who puts a gag—a block held by a handle—under the upper block and brings down the press. If the rail is not entirely straight the gag, which is slightly tapered, is slipped farther under, and this is repeated until all curves are straightened. This work, in addition to being very heavy manual labor, requires a great deal of skill and experience.

*Straightener's helper (Gagger, Hold-up).*—There are two classes of helpers, the gaggers (see above) and those who assist straighteners in handling heavy rails. A gagger needs experience, but chiefly an alert mind that will carry out the straightener's directions and signals quickly and easily. It is not heavy work, but demands constant attention. The rail handler's work is relatively unskilled, but very heavy.

*Driller.*—Operates an automatic multiple drill press which drills the bolt holes in the web of the rail. The work is comparatively simple when the drills are set by a foreman or a drill gauger. The driller brings the lever down or turns the wheel that sets his drill in motion. Much of the handling of the rails is heavy work.

*Ender man (Rail ender).*—Operates an automatic machine that mills or smooths the ends of rails. The work is semiskilled, but rather heavy due to the continuous handling of rails.

*Inspector (Finishing inspector).*—Inspects the finished rail in accordance with the specifications for the particular order and the customs of the individual mill. A preliminary inspection is given before straightening, but the chief inspection follows when the finished rails are ready for shipping. The work varies according to the class of product of the particular mill and the care with which the mill inspects its own product.

*T-rail turner (Inspector helper, Inspector laborer).*—Turns T rails for outside inspection. Heavy labor, unskilled.

*Cold-saw man (Cold-saw operator, Sawyer).*—Operates levers controlling saws which cut defective rails to shorter and salable lengths. This work is not done nearly so rapidly as hot sawing, nor does it require as careful a man. The work consists largely in supervising the helpers who handle the rails and in operating the saw levers.

*Cold-saw man's helper.*—Handles the rails for the cold saw and cleans up scrap. Comparatively unskilled, but heavy manual labor.

*Yard craneman.*—Operates crane for handling product, etc., in yard.

*Rail yard laborer (Loader, Piler, Wrencher).*—Stocks and loads rails in stock yard; loads cold cuttings, scrap rails, etc. Heavy manual labor, unskilled.

*Clean-up.*—Sweeps and cleans up mill. Unskilled work.

## BAR MILLS.

### CHARGING AND HEATING—IRON BARS.

*Stock laborer.*—Wheels scrap to fagot makers, piles and wheels muck bars, carries fagots and muck bars to furnaces. Heavy materials are carried on small cars sometimes pulled by horse. Light materials are handled in wheelbarrows. Light manual labor, involving danger of cuts on hands and from material falling from crane in stock yards.

*Fagot maker (Piler, Scrap piler).*—Makes up a rough box of pieces of muck bar into which small pieces of wrought-iron scrap are put and the whole bound with wire. These scrap piles or fagots are heated to a welding heat and rolled into muck bar. Light work, requiring little skill or experience.

*Heater, fagots.*—Has charge of the furnaces in which fagots are heated to a welding heat for rolling. The heater supervises and assists in placing the fagots in the furnace and in drawing them when properly heated. Highly skilled men are required for the position. Considerable manual labor is required, with exposure to furnace heat, which has been lessened in some places by the use of water-cooled furnaces.

*Heater's helper, fagots.*—Assists the heater in charging the furnace and drawing heats. When charging heavy fagots, the heater usually holds the "peel" or charging bar, the helper and run-down bringing the fagot to the furnace with a pair of suspended tongs.

Some furnaces are equipped with a chain cable which may be hooked to heavy heats to assist in drawing them from the furnace. The cable is controlled by levers operated by a lever boy or pull-up.

*Fireman*.—Shovels coal into furnace and tends fire. Unskilled, manual labor, dirty and smoky.

*Ash man*.—Cleans grates and removes ashes from furnaces. Unskilled, manual labor, with shovel and wheelbarrow.

*Cinder man*.—Taps the cinder (slag) from the furnace and takes care of all that runs out of the tap hole during the boil. Wheels cinder casts from furnace to cinder pile or cars, using wheelbarrow or cinder buggy. This cinder is carefully preserved, as it contains a large percentage of iron. Hot, but not very heavy work. Comparatively unskilled, with some danger from explosions of cinder.

*Run-down*.—After a heated fagot has been drawn from the furnace by the heater and his helper, the run-down takes it to the rolls and enters it into the first pass, or delivers it to the rougher. The fagot is carried in tongs suspended from an overhead trolley by a chain. Hot and heavy work, with rest periods while fagots are heating. Some skill, acquired only by experience, is required to handle the fagot and start it through the rolls.

#### CHARGING AND HEATING—STEEL BARS.

*Billet yard laborer (Billet straightener)*.—Handles billets in stock yards, piles, loads, assortments, hooks to crane, etc. Much of the material is hot from the blooming mill when handled, and in some places the work is done outdoors, regardless of weather conditions. Moderately heavy, unskilled, manual labor, with danger of injury from cranes and yard locomotives.

*Billet chipper*.—Removes defective places from billets by means of a pneumatic chipper. Light, unskilled work.

*Craneman*.—Operates the few small cranes used in bar mills, bringing billets to furnace and handling finished product, scrap, and machinery, and in making roll changes. Magnet cranes are used to a great extent. Chiefly low-grade cranes are employed for the position.

*Crane hooker (Hook-up, Magnet placer)*.—Hooks chains on materials to be lifted by cranes, removes chains after materials have been transferred to the desired position, and assists around magnet crane. Unskilled, manual labor.

*Stocker (Unloader, Steel unloader)*.—Unloads and handles the pieces of steel (billets) intended for the heating furnaces. The billets are usually stacked in piles in the yard, each pile representing a separate size and character of steel, which is indicated by marks on each billet, although in some cases they come directly from the blooming mill across transfer tables. The billets are taken from these piles, or from the cars in which they are received, and loaded on barrows or trucks, which are pushed to the furnaces. In the most modern plants this occupation is largely eliminated by the use of magnet cranes and low trucks operated electrically or by narrow-gauge locomotives or by the use of roller conveyors. The stockers also handle the coal for the furnaces if solid fuel is used. The work is heavy, varying considerably both in character and in severity, and is performed by unskilled workmen.

*Charger (Charging-machine operator)*.—Puts the iron or steel billets into the heating furnace as directed by the heater. A large part of this charging is done by hand, the billet being laid on the flat end of a long iron tool known as a "peel," which is pushed into the furnace and the billet laid at the proper point. In many of the newer plants, however, the billets are pushed into the furnace by mechanical pushers, which the charger controls by levers, the heater's helper and a laborer straightening the billets on the skids in front of the pusher. In a number of mills the heater's helpers charge the furnaces. The work of hand charging is hot and heavy, requiring but little skill or experience. The work is intermittent in character, affording the chargers an opportunity to get away from the furnace heat at intervals.

*Heater.*—In charge of one or more heating furnaces, sees that specified stock is charged and that the proper temperature is maintained, and is otherwise generally responsible for the proper working of a furnace and for the minor repairs to the lining. A very important and responsible position, requiring considerable practical knowledge of the heat treatment of metals, which can be gained only by long experience. The heater probably has more to do with the successful operation of a mill than any other employee. The work is largely supervisory.

*Fireman.*—Fires furnaces and cleans grates and pits. Heavy manual labor, unskilled, done under conditions of great heat.

Many furnaces are gas fired, making the services of a fireman unnecessary.

*Heater's helper.*—The duties of the heater's helper vary with the character of the furnace or mill and with the division of work in the various plants. In some plants the heater's helper performs all the duties connected with heating the steel and delivering it to the rolls, that is, firing the furnace, cleaning the grates, tapping the cinder, repairing the furnace bottoms, charging and drawing the steel, and carrying it with tongs down to the rolls. The firing of the furnace and the cleaning of the grates frequently are eliminated from the list of duties by the use of a gas-fired furnace, the charging of the steel by the employment of chargers or by the use of "continuous" furnaces, while the drawing and delivery of the steel to the rolls is almost always eliminated by the employment of drag-downs or by the use of some form of mechanical conveyor in connection with a charging machine. The character and skill required by the work vary widely, ranging from that of a first helper, who takes charge of the operation of a furnace, to that of an unskilled laborer, who wheels out cinder.

*Cinder man (Cinder monkey, Cinder snapper).*—(Same description as for Cinder man, Plate mills.)

*Ash man.*—Cleans grates and removes ashes from furnaces. Unskilled, manual labor.

*Coal screener.*—Screens coal for furnaces. Unskilled, manual labor.

*Coal wheeler.*—Shovels coal into a wheelbarrow and delivers it to the furnaces. Heavy manual labor, unskilled.

*Door operator (Door boy, Pull-up).*—Operates levers or pull chains by which the furnace doors are raised and lowered. Positions are ordinarily filled by boys, as the work is light.

*Signalman.*—Signals furnace crew to deliver billets to rolls.

*Pump man.*—Operates pumps furnishing water for skid pipes at heating furnaces.

#### ROLLING AND MISCELLANEOUS.

*Drag-down.*—Draws and carries steel billets from the furnace to the rolls, except where mechanical conveyors are used, and, in some places, starts the billets through the first pass of the rolls. The steel is drawn by grasping it with a pair of tongs and pulling it out of the furnace, and is then carried to the rolls either by simply dragging or sliding it along the steel floor; or, if the piece is heavy, the tongs may be supported by a chain from an overhead trolley (telegraph) and the steel be carried down without touching the floor, or the steel is put on a small iron buggy and wheeled down to the rolls. The work is hot and heavy, requiring no great skill, but considerable dexterity, acquired only through experience, is necessary in order to handle the material with facility.

*Transfer man.*—Operates lever controlling the transfer rolls which carry billets from the furnace to rolling crew. Light work, requiring but little experience.

*Roll engineer.*—Operates the engine which drives the rolls and sees that they are kept in proper condition. All engines used in these mills are nonreversing. The work is similar to that of an ordinary stationary engineer.

*Oilers.*—Oils and cleans engines. Assists roll engineer and is in a position to become familiar with his duties.

*Oiler's helper.*—Carries oil and helps to oil engines.

*Roller.*—In charge of and responsible for the operation of the rolls. The duties consist chiefly in seeing that the proper rolls are installed, that they are properly set and kept in good condition, and that the rolling crew performs every part of its work properly. The roller also directs and takes part in the changing of the rolls, and when there is a "cobble" or any other difficulty he works with the crew. In case the steel is not properly heated he notifies the heater. Very responsible position in which a thorough practical knowledge of the properties of steel is indispensable.

*Rougher and Catcher (Rougher-up and Rougher-down).*—Pass the steel back and forth through the first stand of rolls. The rougher takes the billet from the drag-down—when the drag-down does not put in first pass, which is seldom—grasping it near the end with a pair of specially shaped tongs. The other end is thrust between the lower set of rolls, where it is gripped and drawn through by the rolls as they revolve. As it comes from the rolls on the other side it is grasped with a similar set of tongs by the catcher, frequently known as the rougher-up, who, in a "three-high" mill, puts it between the center and upper rolls, which carry it back under pressure to the rougher-down. In "two-high" mills, of which few remain, the piece is put on top of the upper roll and is thus carried back to the rougher-down without being worked. This process is repeated until the piece has been considerably elongated and reduced in cross section. Heavy work, with exposure to heat and flying sparks. A rather long period of training in other positions is necessary before a man is able to work at the roughing rolls. The difficulty and severity of the work increase generally with the size of the piece handled and the speed of the mill.

*Hook-up (Hook man).*—The rougher on mills with rolls 12 inches or more in diameter, and on the larger mills, the roughers, catchers and finishers are almost always assisted by hook-ups. The hook-up derives his name from the long bar which is used in his work. It has a saw-toothed hook on one end and a handle on the other, and is suspended by a chain at a point nearer the hook than the handle. The hook is placed underneath the billet to raise it, the bar acting as a lever, with the chain as a fulcrum. Hot and heavy manual labor, requiring a considerable amount of skill in handling heavy pieces.

*Billet boy (Pass boy).*—When the mill is of the Belgian type—the roughing rolls set tandem in front of the stranding and finishing rolls—the billet boy catches the piece as it comes through the last pass on the roughing rolls, drags it to the strand roll and enters it in the first pass. Heavy manual labor, requiring but little skill or experience.

*Strander (Edger, Pony rougher, Poke-in, Stick-in).*—When the piece comes from the roughing rolls it is grasped with tongs by the strander and the end put into the proper pass. The work of the strander is lighter than that of the rougher, as the piece is by this time greatly reduced in section; but it requires a great deal of dexterity to handle the rapidly lengthening piece of steel and to enter it in the proper passes.

*Finisher.*—Handles the steel at the last or finishing pass. In rolling bars the piece is usually run out to the floor and lies there for a moment in order to allow the scale to form, so that the finishing rolls will remove it. The work is light, the amount of skill and dexterity required depending entirely on the size of the product and the speed of the rolls.

*Table lever man.*—Operates levers which raise and lower tables in front and behind roughing rolls of three-high mills to bring the billet in proper position to pass through the rolls. In some places a lever man is provided for each table. Also controls manipulator and live rolls on transfer tables. Light work, requiring an experienced employee.

*Roll scale man.*—Shovels scale from pit under rolls and carries it away on a wheelbarrow or cart, when it is not taken away by a crane. Unskilled, manual labor.

*Greaser (Roughing table oiler).*—Greases the roll necks and the gears and rollers for the conveyors, if any are used. Low-grade work, requiring little skill or experience.

*Hotbed man (Straightener, Drag-out).*—In the greater number of bar mills the piece as it comes from the finishing rolls is grasped by the drag-out with a pair of tongs and dragged off down the steel floor to the hotbed. The piece is straightened either by being laid out at full length, or if a more perfect straightening is needed, by putting the two ends in grips which pull away from each other, thus effectually stretching the piece out perfectly straight; or, if the bar is large, wooden mallets are used to maul out any bends. In the most modern mills the piece is carried out by roller or cone conveyors to an inclined automatic hotbed, the piece rolling down the incline as the fingers which hold it in place are lowered. In this case men are required only to operate levers and to straighten out any piece that is bent. The work of the drag-outs and the straighteners on the older mills, which, however, are by far the greater in number, varies in difficulty and severity with the size of the product rolled. In the most modern mills the hotbed man is simply a lever man and needs little skill or experience to perform his work.

*Stretcher man.*—As the last end of the bar comes over the cone conveyor to the hotbed, the stretcher man seizes it in a clamp to stop its progress. It is then transferred to the hotbed by the lever man. Light work, with some exposure to heat; unskilled.

*Hotbed lever man (Cone roller man).*—Operates levers which control machinery for transferring product on hotbeds. Light work, requiring but little experience.

*Hotbed snapper.*—Operates snapper which stretches bars on hotbed.

*Hotbed trough man.*—Throws trough switch, operates pinch rolls, etc.

*Shearman (Hot-billet shearman.)*—In charge of shears which square bars at ends and cut them into proper lengths. The shearman is responsible for the lengths cut and must decide what portion of the bar is to be scrapped. Light manual labor, requiring experience rather than skill.

*Shearman's helper.*—Straightens bars on rolls, helps to set gauge, watches bars and sees that they are going through shears properly. Light manual labor, unskilled.

*Shear table lever man.*—Operates roller table back of shears.

*Shear scrap man (Shear laborer).*—Picks up scrap around shears and carries away on wheelbarrow or piles in boxes to be removed by crane. Light, unskilled work.

*Snap shearman.*—Cuts ends off bars before they enter the finishing rolls, by placing bar in small alligator shears. This work is usually done by the catcher who enters the bar in the first pass of the finishing rolls.

*Hot-saw man (Hot-saw lever man).*—Operates hot saws, cutting sheet bars into lengths. An experienced employee is required for the work, which is light manual labor.

*Hot-saw helper.*—Oils machinery and sees that bars fall into the cradle after they are sawed. Unskilled, manual labor.

*Marker.*—Paints size, order number, etc., on finished product. Semiclerical position; light work.

*Bundler.*—Assembles the sheared bars into bundles and binds them with wire for shipment. The work is usually done in direct connection with the shearing and is very frequently a part of the duties of the shearman's helper. Light work, demanding only unskilled workmen.

*Cold-saw operator.*—Operates cold saw which cuts finished bars into desired lengths. The saw is operated by means of levers, little skill or experience being required.

*Cold-saw laborer.*—Handles bars and places them in proper position on rolls in front of saw to be sawed into lengths. Moderately heavy manual labor, unskilled.

*Laborer.*—Cleans up and does the many light jobs around the mill. Chiefly light work, requiring only unskilled workmen.

*Twisting-machine operator and Twisting-machine operator's helper.*—The twisting machine contains several sockets which may be revolved. In each of these sockets

the end of a rod is placed by the operator, his helper putting the other ends of the rods in stationary sockets so that they are held firmly in place. The operator then moves a lever which causes the revolving sockets to move, which twists the rods into spiral shapes. Light manual labor that requires but little skill.

*Twisting-machine laborer.*—Brings rods to machine to be twisted and piles them after twisting is done. Unskilled, light manual labor.

### ROD MILLS.

*Stocker.*—Unloads and handles steel billets for heating furnaces. In modern plants the billets are usually carried from the cars in which received to the furnaces by a magnet crane, the work of the stocker being limited to arranging the billets in even rows in order that they may be picked up readily by the magnet. In the older-style plants the billets are loaded on trucks and pushed to the furnaces. The work is light, except where hand loading is in vogue, and is done by unskilled workmen.

*Craneman.*—Operates magnet crane bringing billets from stock yards or cars to skids or runners in front of the heating furnaces. Light work on which low-grade cranemen may be employed, although men who are skilled in repairing and maintaining electrical apparatus are sometimes employed to insure against breakdowns which would stop the supply of billets and cause a mill shutdown.

*Billet man.*—Arranges billets on the skidway behind continuous furnaces so they will enter the furnace on the same curve and go through in a straight line. Light manual labor, unskilled.

*Charger (Plunger, Pulpit man, Pusher, Pusher man).*—After the billets are arranged on the skidway behind the "continuous" furnace, they are pushed into the furnace one at a time by means of a hydraulic pusher which the charger controls with a lever. As a billet is pushed into the back of the furnace, it causes a heated billet to drop from the front of the furnace upon a conveyor which carries it to the rolls. The charger is stationed some distance from the furnace. The work is light and requires neither skill nor experience. Where the billets are charged into the furnace by hand, the work is hot and heavy.

*Heater.*—The heater is in direct charge of the heating furnaces. He must see that the billets are charged properly, that the proper temperature is maintained, that the billets are delivered to the rolls at the right heat, and is, in general, responsible for the proper working of the furnaces. A very important and responsible position, requiring considerable practical knowledge of the heat treatment of metals, which can be gained only by long experience. The work is largely supervisory, although at times the heater assists employees working under his supervision.

*Heater's helper.*—Regulates fires, tends water-cooling system, assists in cleaning scale from furnaces, and does general work around the furnaces under the direction of the heater. The character of the work varies considerably according to the type of furnace used, ranging from heavy manual labor on hand-charged furnaces to comparatively easy work on continuous furnaces. The helper may be considered as a semiskilled employee who may become very proficient with experience and capable of performing the duties of heater.

*Fireman.*—Fires furnaces with coal or coke and cleans grates and pits. Many furnaces are gas fired, making the services of a fireman unnecessary. Moderately heavy manual labor, unskilled, done under conditions of some heat.

*Cinder man.*—Removes cinder which collects in the bottom of the furnace and takes it away in a cinder buggy or wheelbarrow. The cinder is preserved for use in the open-hearth or blast furnaces, since it contains a high percentage of metal. Unskilled, light, manual labor.

*Shortstop (switchman).*—As the heated billets come from the furnace they are carried to the rolls on a conveyor. The shortstop operates levers which block the conveyor and check the progress of the billet until the rolling crew are ready for it. He

also switches billets from the conveyor to the floor when there is a breakdown and the billet would become cold before it could be rolled. When two mills are being operated by one furnace, he switches the billets to the different rolls. He also signals the charger when to deliver a heated billet from the furnace. The work is light, being done by levers, but a semiskilled employee is required for the position. The short-stop is usually advanced to the position of bull dogger, and then to rougher.

*Roller.*—Is in charge of the rolls and is responsible for their operation. The duties consist chiefly in seeing that the proper rolls are installed, that they are properly set and kept in good condition, and that the rolling crew performs every part of its work properly. He directs and sometimes assists in changing the rolls and notifies the heater when the steel is not properly heated. Very responsible position in which a thorough practical knowledge of the properties of steel and the rolling processes is indispensable.

*Rougher and Bull dogger.*—The billet comes from the heater on the conveyor and goes through the first pass of the roughing rolls. As it comes through the rolls it is grasped by the rougher with a pair of specially shaped tongs and placed between the center and lower rolls which carry it back under pressure to the bull dogger. The bull dogger grasps the billet with his tongs, which are suspended by a chain that acts as a fulcrum, and passes it back to the rougher between the center and upper rolls. The process is repeated until the billet is reduced in cross section and elongated as desired. Heavy manual labor, requiring considerable skill and experience. The men are exposed to the heat of the billets handled, but in most mills heat conditions are alleviated by cold-air blasts.

*Catcher (Sticker-in, Ten-inch man, or according to size of roll).*—After the piece leaves the roughing rolls it is passed through several sets of rolls to reduce it to the proper size. As the piece comes through one set of rolls it is grasped with tongs by the catcher, who trims the end on small alligator shears and passes it back through another set of rolls. The catcher's work is lighter than that of a rougher, but it requires considerable skill and dexterity to handle the rapidly lengthening piece of steel, which runs through the mill at a very high speed, and to enter it in the proper pass. Catchers start on the first passes and are advanced to the position of finisher as they become proficient.

*Hooker.*—As the piece comes through one set of rolls and is started through another set, it loops out and runs into a pit. This loop is due to the fact that each set of rolls reduces the cross section of the piece to such an extent that it can not pass through the succeeding set of rolls as rapidly. The hooker, by means of long steel rods hooked at the ends, keeps these loops straight and running freely. As several loops may be in a pit at one time, quickness, accuracy, and nerve are required. The safety of the catcher depends upon the pieces being kept straight, which makes the position a responsible one. The work is light and easily learned and requires but little skill or experience. There is some exposure to heat, but not to extreme heat.

*Finisher.*—Catches the piece as it comes through the next to the last roll and enters it at the last pass or finishing roll. The work is moderately heavy and very rapid, requiring a high degree of skill and dexterity as the rolls are speeded up so that the rod is running at the rate of 1,000 to 1,500 or more feet per minute. The finisher has general supervision over the rolling, under the roller, to whose position he is in line for promotion.

*Reel hooker (Puller-off).*—As the rods come from the finishing rolls they are automatically wound around rapidly revolving reels. When the reel is wound the reel hooker opens it by pulling a lever, and pulls the bundle of rods from the reel to the conveyor by a steel bar having a hook on the end. He then readjusts the reel for rewinding. Levers that drop reels and return them to position are sometimes operated by a second man, called the "pulpit" man or reeler, the reel hooker pulling the bundles of rods from the reels to the conveyor only. One hooker has charge of several reels. Moderately heavy, unskilled, manual labor.

*Conveyor man (Conveyor hooker).*—Stationed at the end of the conveyor that brings the bundles of rods from the reels. As the bundle comes on the conveyor the conveyor man twists it with a small steel hook so that it stands upright and is caught by a large hook on the cooling conveyor chain. This is an endless chain that carries the bundles a sufficient distance to allow them to cool before they are removed. Where a chain and hook are not used, the conveyor man is located in a "pulpit" and operates levers that bring the buggies under the conveyor and pushes the bundles of rods into them from the conveyor. Light, semiskilled, manual labor.

*Take-off man (Pull-off).*—Removes bundles from hooks of cooling conveyor and places on trucks, using a long hook suspended by a chain which acts as a fulcrum, or straightens bundles on buggies where chain-and-hook conveyor is not used. Also ties ends of rods around bundles. Moderately heavy, unskilled, manual labor.

*Buggy man (Trucker).*—Pushes truck cars or buggies loaded with bundles to scales for weighing, then to the yard for piling, to shipping platform, or to cleaning house of wire department. Moderately heavy, unskilled, manual labor.

*Suet man.*—Greases bearings of rolls in mill and inspects roll bearings to see that they do not become overheated. Light work, unskilled.

*Scrap hooker.*—Takes away from rolls pieces which become bent or twisted so they can not be finished. Also shovels scrap ends into wheelbarrow and takes to scrap pile. Moderately heavy, unskilled, manual labor.

*Roll turner.*—Cuts rolls to proper surface and makes passes in rolls. Roll turners are not necessarily general machinists, but they are highly skilled in their particular work, which requires great accuracy.

*Shearman.*—Cuts up "cobbles" on alligator shears for scrap to be remelted in open-hearth furnaces. Unskilled, light manual labor.

*Scrap baller.*—Operates electrically driven machine, or reel, which balls up spoiled rods and scrap wire to be taken to the open-hearth furnaces for remelting. There is some danger of injury in handling the long pieces of scrap, but machines are usually well protected by safety devices. Moderately heavy, unskilled, manual labor.

*Sweeper.*—General cleaning up around mill.

*Roll scale man.*—Shovels scale from under rolls and carries it away in wheelbarrow. Light, unskilled work, sometimes performed by cinder man.

*Engineer.*—Regular stationary engineer in charge of engines that drive finishing and roughing rolls. When rolls are driven by electric power, the motor is in charge of a motorman, who is a skilled electrician.

*Oiler.*—Cleans and oils roll engines. Regular duties do not require a skilled man, but an opportunity is afforded to learn the work of the engineer.

*Rod pilers.*—Pile bundles of rods in stockyards. Unskilled, manual labor.

*Loader.*—Trims ends of rods with hand shears, ties bundles together with wire bands, and loads into cars. Unskilled, manual labor.

#### WIRE MILLS.

*Stocker.*—Pushes trucks loaded with bundles of rods from stockyard to cleaning room of wire mill. Moderately heavy, unskilled, manual labor.

*Pin man (Acid craneman's helper).*—The bundles or coils of rods come to the cleaning room arranged in a vertical position, side by side, on trucks. The pin man pushes a large wooden pin through all of the coils and fastens each end of the pin to the crane. He then assists the craneman in dipping the coils into the acid bath and in removing them to the conveyor. Unskilled, light, manual labor.

*Acid man.*—Has charge of the acid bath, prepares the acid solution, regulates the temperature of the bath (steam heated) and, in some plants, inspects the rods after they are dipped. Is responsible for the proper cleaning of the rods. A highly skilled position, requiring a man with considerable experience.



*Acid craneman.*—Operates steam crane for handling rods from trucks to acid bath. The rods are lowered into the acid bath and allowed to remain there long enough to remove all scale and impurities. They are then lifted from the bath, rinsed in water, and put on the "sull rack" or conveyor which carries them through a water spray that causes a slight rust or "sull" which aids as a lubricant in wire drawing. Light, unskilled, manual labor, but requiring experience to tell when rods are properly cleaned. The work of the craneman and pin man is wet and dirty, with exposure to steam and to fumes from the acid bath. In the newer plants fumes are carried away from the tanks by suction.

*Yeast tender (Coating mixer).*—Makes a solution of lime, yeast, water, etc., and delivers it to the lime bath and puts it into the tanks. Light manual labor, requiring little skill or experience.

*Lime craneman.*—Operates small crane which removes the rods from the sull rack, dips them in a tank containing a solution of lime, which acts as a lubricant and protection from corrosion, and places them on a truck to be taken to the dry house. Light, unskilled, manual labor.

*Dry-house wheeler.*—Pushes trucks loaded with rods from the lime tank to the dry house. Pulls out pin before taking to dry house and piles on truck to be returned to acid room. Unskilled, manual labor.

*Fireman.*—Has charge of and is responsible for maintaining the proper temperature in the drying kilns where the rods are dried after being dipped in the lime solution. Kilns are heated by coal, coke, gas, or waste heat from other furnaces. The work requires a man of some experience. Little manual labor is involved unless the kilns are heated by coke or coal.

*Rod wheeler.*—Where electric tractors or mules are not used, pushes trucks of rods from drying furnace to wire drawers. In some plants unloads rods from trucks. Moderate, unskilled, manual labor.

*Buggy supplier.*—After rods have been delivered to wire drawers, the buggy supplier pushes the empty trucks or buggies to the lime tanks to be reloaded. Light, unskilled, manual labor.

*Wire drawer.*—Takes bundle of rods from truck or floor, places on a freely running reel, and trims and points end of rod in small swaging rolls or rotary rolls. After the rod is pointed and a safety device is put on, it is taken to the drawing frame, and the pointed end put through the die. A mechanical grip is then fastened to the pointed end, which draws the rod through the die sufficiently to attach it to a block which revolves and draws the rod through the die and winds the wire on the block. The die is a steel plate or chilled iron die containing a number of holes the same diameter as the wire to be drawn. The rod runs through a die hole and is reduced in size to the diameter of the hole. It is a cold process and the rod passes through a lubricating grease before entering the die. After the wire is drawn the wire drawer removes the coil of wire from the block and places it on a truck for removal, or on a roll for further drawing. Light to heavy manual labor, depending on weight of material handled, requiring a skilled and experienced employee.

*Wire wheeler.*—Wheels trucks of wire from wire drawers to stock room, shipping platform, etc. Unskilled, manual labor.

*Gauger.*—Inspects wire and gauges it with a V-gauge to see that it is drawn properly. Work supervisory and skilled.

*Die reamer.*—Reams chilled iron dies to proper sizes. The die holes are first drilled out on a power drill, then reamed to the proper size by holding against a revolving cutting tool. Light work, highly skilled. The quality of wire drawn depends upon the reamer's accuracy in reaming the dies.

*Plate batterer.*—Pounds steel die plates under a steam hammer to close die holes which have become worn and must be repunched to proper size. Semiskilled labor.

*Plate setter.*—After steel die plates have been battered under the steam hammer, the setter punches out the holes to desired size, using a hand punch. Highly skilled work, accuracy in sizing the die holes being necessary to produce a perfect wire.

*Oiler.*—Oils gears, line shafting, etc., in mill. Common, unskilled labor.

*Scrap man.*—Collects boxes of scrap from around wire-drawing machines, loads on trucks, and takes to balling machine. Moderately heavy, unskilled, manual labor.

*Sweeper.*—An unskilled laborer doing general sweeping and cleaning around the mill.

*Engineer.*—Has charge of engines furnishing power to wire mills. A skilled stationary engineer.

*Oiler.*—Oils and wipes engines. Semiskilled, with opportunity to learn duties of engineer.

#### GALVANIZING.

*Reeler.*—Places bundle of wire on reel back of annealing furnaces, from which it is drawn slowly, passing successively through the annealing furnaces, acid bath, water bath, the spelter or galvanizing bath, and sometimes a second water bath, after which it is rewound on blocks. As the wire runs off one reel, the reeler splices the end to the end of a new coil, which makes a continuous wire passing through the galvanizing process. If the furnaces are gas fired, the reeler looks after the gas flow and temperature. Moderate manual labor, requiring experience rather than skill, and quickness in splicing wires and straightening out trouble. Reelers usually are advanced to positions as blockers.

*Fireman.*—When annealing furnace and spelter tanks are heated by coal or coke, instead of by gas, a fireman is employed who tends fires and is responsible for temperatures. Manual labor, requiring experience to maintain even temperatures.

*Wiper.*—As the wires emerge from the spelter or galvanizing bath they pass under small balls of asbestos, held in place by levers, which wipe the surplus spelter from the wires. As a spliced place in the wire comes from the tank, the lever must be lifted to allow it to pass. At the same time the ball of asbestos is removed and a new one inserted. Also watches spelter pan to see that the proper temperature is maintained, puts the spelter in the pan, keeps skimmings of spelter, and at the end of the week cleans dross from pan. The skimmings are afterwards refined to save the zinc. The work is light, highly skilled, and requires quickness and accuracy.

*Blocker.*—After wire is galvanized, it is automatically wound on blocks. The blocker removes the bundles of wire from the blocks, cuts out splices and imperfect places, ties ends of wire, and, in some places, helps to load bundles on trucks. Moderate manual labor, semiskilled, with opportunity for advancement to wiper's position.

*Scrap man.*—Collects scrap wire and wheels to bundling machine; also wheels spelter to galvanizing tanks. Common, unskilled labor, light work.

*Bundler.*—Ties wire bands around bundles of wire after they have been galvanized and loads on trucks. Moderately heavy, unskilled, manual labor.

*Tester.*—Tests samples of wire in laboratory to see that they are properly galvanized. Skilled, light work.

*Inspector.*—Inspects wire to see that it is of proper size and galvanized properly; also to see that the blocker has cut out all imperfect places. A highly skilled position, next to foreman in importance.

#### TUBE MILLS.

##### BUTT WELDING—TUBES UP TO 3 INCHES.

*Craneman.*—Operates crane unloading skelp from cars to tube mill. Light work, requiring little experience.

*Crane hooker.*—Hooks crane chains on cradles containing skelp, signals craneman, and unfastens chains after skelp is unloaded from car. Light work, unskilled.

*Clipper and Clippers's helper (Shearman and Shearman's helper).*—By means of a foot lever operates machine that cuts bell end of skelp to a tapered point and bends it into a cup shape. The helper assists in putting the skelp into the machine and removing it after cut and cupped. In most places, this work is done in the skelp mills. Moderately heavy labor, unskilled.

*Bend-up.*—Skelp bars are bent up at one end so they will not tear the furnace bottom as they are pushed in. Bars for butt welding are small and the bending is done by the bend-up who uses a short bar or wrench, called a "dog," for the purpose. Moderate labor, unskilled.

*Charger (Poke-in).*—When a charging machine is used to put skelp into the furnace the charger slides the skelp from the pile to the trough of the charging machine. In some places, this work is done by the clipper and his helper. Light skelp usually is put into the furnace by hand, the charger's helper carrying the skelp to the furnace and the charger putting it into the furnace. In either case, the work is semiskilled and moderately heavy.

*Charging-machine operator (Controller boy, Motorman, Pusher runner).*—Operates usually from a seat, by lever control, the electric charging machine that pushes skelp into the furnaces. The work is light and can be performed by an unskilled person of ordinary intelligence.

*Picker (Shove-up).*—Stands on the front or charging side of the furnace and with a steel bar, "picker," straightens the skelp bars in the furnace and keeps them separated. Experience rather than skill is required. The picker is exposed to the furnace heat, and usually wears a protecting mask. As a rule, two pickers work at each furnace, spelling each other for periods of about 30 minutes.

*Welder.*—Catches end of skelp in furnace with tongs about 6 feet long, slips one or two "bells," the diameter of which is the same as the outside of the pipe to be drawn, over the tongs handle and drops the tongs into the groove of the bell block. The bell is larger than the groove in the block and remains stationary, while the tongs catch on a moving endless chain which draws the skelp through the bell, bending it into form and producing the necessary pressure to weld the edges. The welder also looks after the furnace bottom, is responsible for the proper heating of the skelp, and, in some places, regulates the heat of the furnace by changing the gas and air supply. A highly skilled and experienced man is required for the position. The welder and the welding crew work very rapidly, and under conditions of great heat, making it necessary to employ spell hands. The men work from one-third to one-half of the time they are on duty.

*Bell cleaner.*—After the skelp passes through the bell, the bell falls into a trough of water. The bell cleaner knocks off the scale and places the bell on a table for further use by the welder. Light work, unskilled, done by boys.

*Take-off tongs.*—Releases tongs from end of pipe, cools in trough of water and places on conveyor that delivers tongs to welder. Light work, unskilled.

*Hook runner (Buggy boy).*—The old-style welding benches are not equipped with an endless chain but with a straight chain pull with a hook attached to the end. After each piece of skelp is drawn, it is necessary to unhook the tongs and return the hook to the welder. This work is done by the hook runner. Hot and rapid work, done by boys.

*Tong carrier.*—Where mill is not equipped with a conveyor to return the tongs to the welder, they are carried by the tong carrier. Light, rapid, and unskilled work, done by boys.

*Bench mover.*—The welding bench, on which runs the chain that draws the skelp from the furnace, is arranged to move back and forth across the furnace so the welder can reach the skelp in the order in which it was charged. The bench mover operates the welding bench and controls the movement of the chain on the bench by means of lever control. He is seated in a "pulpit," which is well out of the furnace heat. In some mills he also operates a lever which controls a device that throws the pipe

from the welding bench onto a conveyor leading to the sizing rolls. Light work, done by boys.

*Tag welder.*—Welds a small bar, called a tag, to the end of each piece of skelp which is to be drawn through a series of bells each reduced in diameter, a process used in making pipe to withstand heavy pressure. The tag is required because the ordinary tongs will not hold or the skelp itself gives way. Few mills have tag welders. Occupation very similar to blacksmith.

*Size roller.*—Catches end of pipe with a pair of tongs and rolls it off the welding bench, unless this is done mechanically, and starts the pipe through the sizing rolls—a set of grooved rolls that makes the pipe perfectly round. He must see that the weld is up or down as the pipe goes through the rolls. The size roller stands near the furnace opposite the welder, and is exposed to the furnace heat. Heavy manual labor, continuous and unskilled, with frequent rest periods, being a spell-hand occupation.

*Roll setter.*—Sets rolls and makes roll changes, assisted by helpers. Watches the rolling process and sees that pipes are rolled to the proper size. The work is largely supervisory, but involves heavy manual labor during roll changes. A skilled and experienced man is required.

*Hot-saw operator.*—In some establishments double-length pipes are sawed in two before entering the cross rolls. The work is light, as the saws are operated by lever control, and requires but little skill or experience.

*Cross roller (Trough dumper).*—The cross roller sees that the pipe enters the cross rolls properly after passing through the sizing rolls. These rolls keep the pipe to correct size, straighten it, and remove the scale. The cross roller also operates, by lever control, the dumper that dumps the pipe on the conveyor of the cooling bed, and, in some places, drags cobbles to scrap pile. Light, rapid work requiring an experienced employee.

*Hot-pipe gauger.*—Gauges pipe with a caliper gauge as it comes through cross rolls. If not properly sized, notifies the roll setter. Light work, requiring a man of ordinary intelligence. Some exposure to heat.

*Cooling-table man (Straightener, Layer-off, cross rolls).*—Straightens pipes on cooling-table conveyor when they do not fall properly on conveyor after they come through the cross rolls. Light work, unskilled, usually performed by boys.

*Cold-saw operator (Saw boy).*—Places pipe in position on conveyor table, using tongs, and operates saw that saws crop end from pipe. A saw is at each end of the conveyor and one in the middle to cut in two double-length pipe, each saw having an operator. Light work, requiring but little experience, usually done by boys.

*Ripper.*—When rotary cutters are used to cut crop ends from pipes the operator is called a ripper. The work is about the same as that of a cold-saw operator.

*Rack man.*—After the pipes are sawed they drop from the conveyor table into racks which are removed by cranes. The rack man straightens the pipes in the rack when they do not fall properly. Light work, unskilled.

*Craneman.*—Operates the crane that carries racks of pipe from the welding department to the finishing department.

*Crane hooker (Crane follower, Marker).*—Hooks crane chains to racks, signals crane-man and follows crane to finishing department and unhooks chains. Unskilled labor.

*Straightener.*—Straightens pipes that are not straight when they leave the cooling conveyor. The pipe is placed between two small rolls and bent by pulling on the free end. Moderately heavy, unskilled, manual labor.

*Oiler and greaser.*—General oiling and greasing of all machinery, except electric. Light work, unskilled.

*Gas reverser.*—Reverses gas valves to throw gas from one side of furnace to other to keep furnace heat evenly distributed and prevent burning out on one side. As this merely requires the reversing of a lever, the work is light and unskilled. At some places it is done by the gas-producer man.

*Cinder tapper*.—Taps cinder from furnaces and runs it into pans to cool. In some mills this work is done by the furnace crew. Light work, unskilled, with some exposure to heat.

*Cinder, scale, and gravel wheeler (Laborer, Sandman)*.—Wheels cinder and scale from furnaces and brings gravel to furnaces for bottoms. Unskilled labor with wheelbarrow and cinder buggy.

*Mill laborer*.—Does general cleaning work and odd laboring jobs. Unskilled labor, varying from light to heavy work.

*Scrap shearman*.—Cuts scrap and cobbles from finishing and welding departments on alligator shears. Unskilled, moderately heavy manual labor.

*Bell driller (Bell filer)*.—Bores out bells to proper sizes on drill press. A machine hand, semiskilled. Work light.

#### LAP WELDING—BENDING FURNACE.

*Scarfer and helpers*.—When the skelp is not scarfed in the rolling mill it must be done at the tube mill. This is done by passing the skelp through the scarfing rolls or knives, which bevel off the edges to give the proper thickness when welded. The scarfer is a skilled employee who is responsible for the proper setting and operating of the scarfing rolls and knives. The helpers are unskilled laborers who handle skelp.

*Charging-machine operator (Motorman, Controller boy, Pusher runner)*.—In lap welding the skelp is heated in the bending furnace and bent so that the sides overlap, then reheated in the welding furnace and welded. Skelp for small tubes is charged into the furnace several pieces at one time; for large sizes, one at a time. The nature of work and duties are about the same as for the charging-machine operator, butt welding. When heavy skelp is being run, however, the charging machine also is used to push the skelp from the furnace to the bending rolls.

*Charger (Poke-in)*.—Duties and nature of work similar to those of charger and picker combined, butt welding.

*Door boy*.—Opens and closes doors of bending furnace. Light work by lever control, unskilled, done by boys.

*Bender, large tubes (Head man, power bending rolls)*.—The skelp is pushed from the furnace by the charging machine. It passes between power rolls and is bent into the form of a tube, the edges overlapping ready to be welded. The bender controls the rolls by levers, operates the cable that pulls the tube from the rolls after it is bent, usually has charge of the furnace, and is responsible for the proper bending and lapping of the skelp. The work is light, exposed to considerable heat, and requires a man with skill and experience that can be acquired only through practice.

*Bender's helper (Sledger)*.—When the tube is being bent in the bending rolls the edges sometimes are not properly lapped. The helper works with a bar and sledge hammer, under the bender's direction, opening or closing the lap as may be required. Light work, unskilled, done under conditions of considerable heat.

*Bender, small tubes*.—Small tubing is bent by being drawn through a die, as in the butt-welding process, instead of being rolled. The bender pulls the skelp from the furnace with a pair of tongs, regulates the heat of the furnace, and is responsible for the proper bending and lapping of tubes. Requirements about the same as for bender, large tubes.

*Tong runner (Hooker)*.—Fastens tongs on skelp after it is pulled from the furnace by the bender, and fastens tongs to chain which pulls the skelp through the die, bending it to form. Also returns tongs to furnace. Unskilled labor, not very heavy, but rapid and hot.

*Skelp transfer man*.—Operates levers controlling conveyor that carries skelp from bending to welding furnaces. Light work, unskilled.

*Roller-off (Take-off)*.—Where there is no conveyor, rolls bent skelp from bending to welding furnace, using a short iron bar. Light work, unskilled, but hot.

## LAP WELDING—WELDING FURNACE.

*Pit hand (Roll-over).*—Rolls bent tubes from transfer table into trough of charging machine, using an iron bar. When charging machine is not used, pushes bent tubes into the furnace. Unskilled, moderately heavy manual labor, exposed to considerable heat.

*Pusher runner (Pusher, Charging-machine operator, Poke-in).*—(Same description as for Charging-machine operator, above.)

*Turner-down.*—In lap welding, tubes are charged at each side of the furnace and drawn from the center. The turner-down uses a pair of tongs and, as a tube is withdrawn, rolls the others toward the center. Done by pit hand in some places. Unskilled, hot, heavy manual labor. An opportunity is afforded to learn duties of the welder.

*Welder.*—Has charge of the welding furnace and the furnace crew, and is responsible for the proper heating of the bent skelp. Regulates flow of gas and air in the furnace. Supervises the making of furnace bottoms, the work being done by the furnace crew. When small-sized tubes are made, pushes the skelp out of the furnace into the welding rolls. Large sizes are pushed out by the charging machine. The work is highly skilled, largely supervisory and light, except when pushing skelp from furnace, which is hot and heavy work.

*End fixer (End opener).*—While the bent skelp is heating in the furnace, the end fixer keeps the ends of the tubes open so they will enter the welding rolls properly. This is done by means of an iron bar with which the ends are pried back at the lap. The work is done under exposure to the furnace heat, is hot, heavy, and unskilled.

*Baller (Ball man).*—As a tube is pushed from the furnace it enters the welding rolls, which are located directly behind the furnace. These rolls run continuously. To prevent the tube from being crushed, it passes over a ball or mandrel, of the diameter of the inside of the tube, which is attached to a long rod called the welding bar. A fresh ball is put on for each tube, the baller doing this work with a pair of tongs. After the tube has passed over the ball, he removes the ball with a hook and places it in a trough to be cleaned. Iron tubes are passed through a second set of rolls similar to the welding rolls. The crew is the same as at the welding rolls—baller, rod puller, and take-off. The work is light, unskilled, but rather hot, due to the furnace heat. When large-sized tubes are being made, the balls are heavy, and a helper assists the baller in handling them with a small air hoist.

*Baller's helper.*—Assists the baller in putting balls on the welding rod and removing them. Also fixes a wooden plug on the rod when large-sized tubes are being welded. The end of the tube passes over the plug, which then slides along the rod and acts as a support for the tube to keep it from collapsing. Light, unskilled labor, with some exposure to heat.

*Ball boy.*—Keeps baller supplied with proper-sized balls. These balls are kept in bins and taken from the bins to the baller in wheelbarrows. Light work, unskilled.

*Bar puller (Rod puller, Lever man, Rodman).*—After the tube has passed through the welding rolls and the ball has been removed from the end of the welding bar, the bar puller runs the bar back from the rolls and out of the tube by operating a lever. He also operates a lever that dumps large-sized tubes out of the welding trough to the sizing roll trough for inspection by the taker-off, though in some places an extra employee called a lever man is detailed for this work. Light work, requiring an experienced employee.

*Taker-off.*—Rolls small tubes from welding trough to sizing roll trough, inspects lap weld to see that there are no defects in the weld, and, if perfect, starts the live rolls in the trough that carries the tube to the sizing rolls. Imperfect tubes are sent back to the furnace pit to be recharged for a second run. The taker-off has charge of the back of the furnace. His work is light and done under conditions of consider-

able heat. A man of experience is required for the position and one who is able to judge quickly whether a tube is properly welded.

*Turntable lever man.*—Operates levers that control hydraulic lift which lifts defective tubes from sizing roll trough, turns them end for end, and carries to furnace pit for recharging. Light work, unskilled.

*Roll setter.*—(Same description as for Roll setter, Butt welding.)

*Cross roller.*—About the same as cross roller, butt welding, except that rolls are reversed frequently and tubes passed through them several times.

*Poke-in.*—When there are no live conveyor rolls leading to the sizing rolls and cross rolls, the tubes are pushed along the table by a poke-in. The work is moderately heavy, hot, and unskilled.

*Cooling-table man.*—(Same as Cooling-table man, Butt welding, except that one man attends several tables, the tubes being larger and cooler and needing less attention.)

*Cold-saw operator.*—(Same description as for Cold-saw operator, Butt welding.)

*Ripper.*—(Same description as for Ripper, Butt welding.)

*Straightener.*—Large tubes are straightened on an electric or hydraulic press. Rollers are set in the bed of the press over which the tubes are rolled until the bent part comes directly under a plunger. The plunger is then released and its pressure straightens the tube. The work is moderately heavy, a helper assisting the straightener in handling largest sizes of tubes. Little skill is required, but the straightener must have ability to gauge the straightness of a tube at a glance.

*Sticker dresser and patcher.*—At times a tube will stick on the ball when partly welded. The sticker dresser and his helper cut off the imperfect end of the tube with a cold chisel and sledge hammer. They also patch imperfect welds by inserting a piece of cold steel. The tube is then reheated and redrawn which welds the piece inserted. Moderately heavy labor requiring experience rather than skill, which is gained while acting as a helper.

*Ball grinder.*—Grinds welding balls to smooth surface and proper size on emery wheel. Light work, requiring both skill and experience.

*Ball gauger.*—Gauges welding balls and marks their sizes with chalk, after which they are carried to stock bins by laborers. Unskilled, light work.

*Ball rattler (Churn man).*—Places welding balls in a steel drum which revolves by electric power and knocks the scale from balls. Light to heavy manual labor, depending upon size of balls handled; unskilled.

*Gas reverser.*—(Same description as for Gas reverser, Butt welding; also does cinder tapping at lap-welding furnaces.)

*Laborer.*—Wheels sand and broken crockery to furnaces for bottom making, wheels cinder and scale from furnaces, and does general cleaning up around mill. Unskilled labor, varying from light to heavy.

#### SEAMLESS TUBING—HOT MILL.

*Laborer.*—Miscellaneous work—cleaning up scrap, handling machinery, moving material, etc. Work varies from light to heavy manual labor, unskilled.

*Stock laborer.*—Unloading stock from cars and piles and taking to furnace. Work done by small electric cranes. Unskilled, light manual labor.

*Charger, heating furnace.*—At some places the billets are charged into small heating furnaces, heated and then sawed into desired lengths. The charging is usually done by hand and is rather heavy work, unskilled.

*Pusher-out.*—Pushes billets from heating furnace to conveyor leading to hot saws. Moderately heavy manual labor, unskilled.

*Hot sawyer.*—Saws billets, while hot, into desired lengths. Power saws, controlled by lever, are used. The work is light and unskilled.

*Shearman and Shearman's helpers.*—When billets are not heated and sawed into lengths, they are cut on power shears. One helper, called the feeder, pushes the

billets into the shears, the piler takes away the lengths when cut, and the shearman operates the shears and has general charge of operations. The work is moderately heavy. The shearman is a skilled man; his helpers are unskilled, but the work may be considered as training for the higher position.

*Center pressman.*—The lengths of steel that are to be made into tubing are taken by the center pressman, one at a time, placed under a drill press and a hole bored in the exact center to a depth of about  $1\frac{1}{4}$  inches. They are then thrown on a pile to be taken to the furnace for heating before being drawn. Light work, unskilled, requiring a man of ordinary intelligence.

*Billet heater.*—(Same description as for Heater, Rod mill.)

*Charger (Heater's helper).*—(Same description as for Charger, Rod mill.)

*Tongsman.*—Carries the heated billet from the furnace to the piercing mill, usually by means of suspended tongs, "telegraphed." Hot and heavy work, requiring considerable experience.

*Plugger.*—Controls the piercing rolls and puts pointed mandrel on rod over which tube passes when rolled. The rolls are a special conical shape which cause the heated billet to rotate rapidly and move forward. The pressure of the rolls causes the solid billet to open in the center and the pointed mandrel over which it passes smooths and shapes the cavity thus produced. The work is light and unskilled, as the rolls are set by a foreman and are in charge of the piercing-mill operator. Pluggers are advanced to the position of piercing-mill operator.

*Piercing-mill operator.*—Has charge of the piercing rolls and is responsible for the proper piercing of billets. Controls the movement of the rod that holds the piercing mandrel; also the device that throws the tube into a car or buggy after it is pierced. Light work, done while seated, but requiring an experienced employee.

*Tube heater.*—After billets have been pierced, the heater charges the tubes into the furnace and draws them when heated. Hot and heavy work, requiring a thorough practical knowledge of heating steel.

*Trolleyman.*—Takes the heated tubes from the furnace to the rolls, where they are rolled over a mandrel to give the proper diameter and thickness of wall. Hot and heavy work, requiring considerable experience in handling the steel by means of the suspended tongs, or "telegraph."

*Roller and Roller's helper.*—See that the tubes enter the rolls correctly. Very little work in connection with the position. Largely supervisory to see that rolls are running properly.

*Inlet man.*—Pushes tubes from rolls to expanding machine. Unskilled, manual labor.

*Expander.*—A pointed mandrel, whose diameter is the same as the inside diameter desired in the tubes, is placed on a rod by the expander and the tube forced over it by the expanding machine. The work is light, and is done by a skilled and experienced employee.

*Lever man.*—Operates lever that draws mandrel rod from the tube after it has been expanded and tips the pipe into a rack to be carried away by crane. Unskilled, light labor.

#### SEAMLESS TUBING—COLD DRAWING.

*Pointer.*—After tubes have been made they are sometimes reduced in size by cold drawing, which is similar to wire drawing except that the tubes are drawn over a mandrel to prevent crushing. The pointer heats the ends of the tubes in the furnace and points them under a small steam hammer, the point being used to start the tube through the drawing die. Unskilled work, fairly heavy and hot.

*Pointer's helper.*—Assists the pointer in heating tubes and tends the furnace fire. Unskilled, manual labor.

*Pickler.*—(Same description as for Pickler, galvanizing department, Tube mills.)



*Annealer.*—Tubes are charged and drawn into and from the annealing furnaces by hand. This is the work of the annealer. It is heavy manual labor, exposed to furnace heat, and requires a man with considerable experience.

*Benchman.*—After the tubes are annealed, they are drawn through ties by the benchman whose duties and work are about the same as a wire drawer.

*Benchman's helper.*—Puts a rod in the tube to prevent its crushing while being drawn. Unskilled, light labor.

*Gauger.*—Gauges tubes for size and sees that proper dies are used. Supervisory and responsible position.

*Expander.*—After a tube is drawn the rod can not be removed from it until it has been passed through the expanding rolls. The expander operates these rolls, which slightly expands the tube and permits the rod to be withdrawn. Light work, unskilled.

*Stripper benchman.*—After the tube passes through the expanding rolls, the stripper benchman pulls it off the inserted rod. Light labor, unskilled.

#### FINISHING DEPARTMENT.

*Machine hands.*—Include two classes of employees—cutters and threaders. The cutters operate machines to cut off the crop ends of small-sized pipe that is not sawed, and to cut defects from all sides. The machine is practically automatic and lever controlled; the work is moderately heavy, continuous, and unskilled. The threaders operate mechanical machines that thread ends of pipe. The operators usually do not set up their machines, the work requires no skill, and it is only moderately heavy.

*Socket screwer and Socket screwer's helper.*—The socket screwer takes the pipe, inserts the socket in an automatic machine that grips it and revolves it rapidly, screwing the socket on the pipe which is held stationary by a lever-operated device. On small pipe the helper screws the socket on the pipe by hand. In some places this is done by the cutter or his helper. On large sizes of pipe the socket screwer has no helper. It takes longer to screw the sockets onto the pipe and during the time this is being done he does the work usually done by the helper. The work is light, rapid, and unskilled.

*Tester and Water boy (Prover and Valveman).*—Each taking hold of one end of a pipe, they place the pipe in a hydraulic machine that fills it full of water, under pressure. The water boy operates the valve that turns on the water, and the tester watches the pipe for leaks. Defective pipes are thrown out and returned to the machine hands to have the defects cut out and to be rethreaded. Unskilled labor, moderately heavy, and very rapid when handling small sizes of pipe.

*Marker.*—Stencils length of pipe on the pipe, helps the bundler, and in some places inspects for defects. Light work, requiring an experienced employee.

*Stenciler.*—Stencils trade name, length, and weight on pipe. Light work, unskilled, done by boys on small sizes.

*Drifter.*—Places a steel cylinder in end of pipe and drives it through by a steel bar and sledge hammer to clean the inside of the pipe and remove all obstructions. This is done only when specially ordered by purchaser. Heavy manual labor, unskilled.

*Blister man (Swager).*—When a pipe blisters on the inside, the blister man puts a mandrel against it and pounds the pipe with a sledge hammer to close the blister. Heavy manual labor, unskilled.

*Bundler and Bundler's helper (Stocker).*—Place the proper number of pipes in a V-shaped rack for bundling. The bundler then measures the total length of the pipe, calculating the length from one standard piece and deducting or adding the difference due to shorter or longer pipes which he measures with a rope tie. The pipes are then tied into a bundle and a tag attached showing the number of feet it contains, after which the bundle is carried away by a crane. The ends of bundles for foreign

shipment are wrapped in burlap to protect the threads. The bundler is an experienced employee, expert in calculating lengths rapidly; his helper an unskilled laborer. The work is moderately heavy.

*Stamper boy.*—At some establishments a boy marks tags for bundles, as directed by the bundler. Light work, unskilled.

*Ring man.*—Puts a half coupling on the threads of large pipes to protect them during shipment. Light work, unskilled.

*Ring sorter.*—Sorts rings for pipe ends by sizes. The work is light, and usually done by old employees incapacitated for heavy labor.

*Inspector.*—Inspects pipe for size, finish, and threading. Supervisory work, done only by an experienced employee.

*Tumbler.*—Puts special orders of pipe into a drum which revolves and polishes the pipe. Moderately heavy labor, unskilled.

*Laborer (Socket stocker, Scrap man).*—Does general work around the finishing department, wheeling couplings to machines, cutting rope and burlap for bundling pipes, cleaning up, etc. Unskilled, manual labor, varying from light to moderately heavy work.

*Die setter (Die fixer).*—Sets the dies of pipe-threading machines and keeps dies in order. A skilled machinist.

*Die boy.*—When dies are removed from machines the die boy washes and cleans them before they are sharpened or repaired by the die setter. Unskilled, light work.

*Cutter grinder (Die grinder).*—Sets cutters in pipe-cutting machines and keeps them in proper condition. A semiskilled occupation.

*Trough stockers.*—When there is no crane to handle pipes after they leave the finishing machines, the work is done by trough stockers. Heavy manual labor, unskilled.

*Cold straightener.*—Straightens small sizes of pipe—under 2 inches—by placing one end between stationary blocks and bending to proper line. Semiskilled labor, moderately heavy.

*Ring sawer.*—Saws defective sockets into two rings for use of ring man. The work is done on a small cold saw, is unskilled and light.

*Thread gauger.*—Gauges threads of pipe in finishing department for sizes. Light work, requiring an experienced employee.

*Annealer.*—(Same description as for Annealer, Sheet Mills and Crucible furnaces.)

*Annealer fireman.*—(Same description as for Annealer, Sheet Mills and Crucible furnaces.)

*Annealer laborers.*—(Same description as for Annealer, Sheet mills and Crucible furnace.)

*Test maker.*—Takes ends cut off boiler tubes, places over a die and pounds with a hand hammer to produce a flange. Tube must flange out without splitting to be a perfect test. An experienced man is required for the work, which is light.

#### SOCKET DEPARTMENT.

*Shearman.*—Shears iron bars into length to make coupling sockets. Moderately heavy manual labor, requiring an experienced operator.

*Shear laborer.*—Assists the shearman in lifting iron bars to shears. Unskilled labor, moderately heavy.

*Heater and Heater's helper, bending machine.*—Put bars for making large sockets into furnace, remove bars when properly heated and drag to steam bending machine. Also regulate furnace heat, look after bottom and remove scale. The work of the heater is skilled, the helper working under his supervision and learning his duties. Heavy labor done under conditions of considerable heat.

*Bender.*—Small sockets are made on an automatic bending machine which shears the bar to size and bends it to shape in one operation. If the bars are heated, the bender does the heating. The bender assists the heater to put bars into the furnace

and operates the bending machine which grips the bar and holds it against a circular bending mandrel while a roller moving around the mandrel bends it into a ring with the ends overlapping. The bent ring is then picked up by the bender with a pair of tongs and dropped into a chute in which it rolls to the welding furnace. Heavy manual labor, exposed to heat, requiring a skilled employee.

*Socket welder's helper (Heater).*—Heats sockets for welding. Work about the same as that of the heater, bending machine.

*Socket welder.*—The helper places the heated socket on the hammer block, a mandrel is inserted and it is then pounded under the hammer. The welder operates the hammer and is responsible for the proper welding of the sockets. Heavy labor, exposed to heat and sparks; experience required.

*Hammer runner (Hammer driver).*—On large, heavy sizes the steam hammer is operated by a hammer runner, under the direction of the welder. Light work, semi-skilled.

*Laborer.*—Wheeling coal and coke to furnaces, iron to benders and welders, couplings to stock room, etc. Unskilled labor, varying from light to heavy.

*Tappers.*—Operates tapping machine, which threads insides of couplings. These machines are practically automatic, the tapper having only to feed the couplings into the machine and to remove them when threaded. Light work, unskilled.

*Tap setter.*—Sets teeth in tapping machines and keeps them properly adjusted. Light work, highly skilled.

*Tap grinder.*—Sharpens taps and grinds them on emery wheel. Skilled work.

#### GALVANIZING.

*Acid man.*—(Same description as for Acid man, Wire mill.)

*Pickler.*—Has charge of the acid bath and fastens crane chains to tubes which are then placed in the acid bath by means of a crane, removed and rinsed in water and placed on trucks. Manual labor; experience required.

*Dryer.*—Pushes trucks loaded with tubes, which have been pickled, into drying ovens, takes from oven to galvanizing tank when dry, and puts tubes into galvanizing liquid. This is handwork, the pipes being handled with short tongs. Heavy manual labor, unskilled.

*Galvanizer.*—Has charge of the galvanizing tank, the charging and drawing of tubes, tends fire, regulates heat, puts in spelter, and with the crew cleans the tank at the end of each week. Light work, skilled, and largely supervisory.

*Drawer.*—After the tubes are galvanized they are pulled from the galvanizing kettle by the drawer, who uses a pair of tongs for the purpose. As they are pulled up the runway from the kettle, they pass through a ring that wipes off excess galvanizing material. Unskilled, manual labor, varying from light to heavy according to the size of material handled.

*Cooler.*—Takes the tubes after they have been drawn from the galvanizing kettle and dips them into a water bath. Unskilled labor, varying according to whether light or heavy tubes are being dipped.

*Inspector.*—Inspects tubes after they have cooled to see that they are properly galvanized. Light work, skilled.

#### SHEET MILLS.

##### HOT MILL.

*Craneman.*—Operates cranes in hot mill and galvanizing departments. Light work, not very high grade, and requiring but little skill or experience.

*Crane hooker (Pick-up, Hook-up).*—Attaches crane hooks to materials to be moved by crane, and signals operator. Light manual labor, unskilled.

*Stocker shearman (Bar shearman).*—The steel bars come to the shears from the stockyard over a roll table. The shearman operates the shears and cuts the bars into the proper lengths, and he is responsible for the sizes cut. Heavy manual labor, unskilled.

*Stocker laborer (Mill stocker, Shear helper).*—Steel bars are brought by a crane to the roll table leading to the shears. The laborers straighten the bars on the table, using crowbars, and also pile the sheet bars, after these have been cut by the shears, to be carried to the furnace. Moderately heavy, unskilled labor.

*Laborer (coal supply).*—Loads coal on wheelbarrow and wheels it to furnaces of hot mill. Common labor, heavy, unskilled.

*Stoker oiler.*—Oils stoking machinery of furnaces. Light work, hot, dirty, and unskilled.

*Pair heater.*—The sheet bars are brought from the stock house by a crane. They are put into a furnace and heated before being rolled. The pair heater has charge of the furnaces and, assisted by the doubler, charges and draws the bars and drags them in pairs to the roughing rolls. When the pair furnace is separate from the sheet furnace, he fires the furnace and maintains the proper temperature. In some plants he also spells the doubler in operating the screws by which the distance between the roughing rolls is regulated. Heavy manual labor, with short rest periods, requiring some experience. Some furnaces are water cooled, which reduces the temperature in front of them, and a few have mechanical conveyors to carry the sheet bars to the roughing rolls, which lightens the work of the pair heater.

*Rougher and Catcher.*—The rougher, with his tongs, takes a pair of heated bars from the pair heater and passes them successively through the two-high roughing rolls to the catcher, who passes them back over the top roll to be taken off by the rougher while the other is going through the rolls. This is repeated until the bars are sufficiently "broken down," when the rougher and catcher each take one to the finishing rolls where a similar rolling operation is repeated. Then one is laid on top of the other and the two rolled together, the catcher returning them to the rougher as before. After these pairs are rolled together, they are separated by the matcher, put into the furnace, and heated for further rolling. Skilled work, rapid and heavy, done under conditions of great heat.

*Matcher.*—The matcher, sometimes assisted by the rougher, pulls the two sheets apart after they have been rolled together, and then piles together a number of sheets, depending on the desired gauge, and delivers them to the sheet heater. When the lighter gauges are desired, the packs, after the next rolling, are pulled apart by the matcher and doubler, and the required number piled together in a pack. The matcher also assists the doubler in doubling packs. Hot and hard manual labor requiring quickness in opening the packs and accuracy in matching the sheets. If the packs are not matched up accurately, they may be too short when rolled or too narrow when sheared, causing loss. Very little skill is required, the position usually being the "breaking-in" job of the rolling crew. The matcher has shorter rest periods than others on the rolling crew, owing to the diversified nature of the work.

*Sheet heater and Sheet heater's helper.*—In charge of the heating furnace in which the sheets in packs (doubles, fours, or eights) are reheated for the finishing rolls. The heater with his helper fires the furnace, which includes shoveling the coal and keeping the grate bars clean. They also charge and draw the packs and deliver them to the roller at the finishing rolls. Hot and hard manual labor requiring strength and dexterity in handling the packs of sheets. Considerable skill and experience is required in heating, so as not to "burn" the sheets or to heat them so they weld when rolled. Many furnaces are equipped with automatic coal feeders which lessen the work of firing.

*Doubler.*—The doubler assists the pair heater in charging the bars into the pair furnace. The doubler and matcher usually work together in pulling the sheets apart,

and in matching and bending the pack transversely. The doubler then stamps the bend flat with a machine and delivers the doubled packs to the sheet heater for the final heating. He also drags the packs, after they have had the finishing passes through the rolls, to the shears. In some places, the catcher and doubler take turns in catching the packs at the finishing pass and dragging them to the shears. The work is diversified, rapid, and hot when doubling and matching, and heavy when dragging the finished packs to the shears.

*Roller.*—The roller is in charge of all the processes of heating and rolling. He gives a helping hand whenever necessary, but usually his active duty begins when he takes the "packs" of heated sheets from the sheet heater or his helper and passes them through the finishing rolls to the catcher who returns them over the rolls, as many passes being made as are necessary. This finishes the rolling of the heavier gauges. When lighter gauges are required the packs are delivered a second time to the sheet heater, reheated, and returned to the roller, who again passes them through the rolls until they are of the required gauge. It is during the finishing passes that the greatest skill is required. With a metallic measure the roller notes the lengthening of the sheets until that length is reached which owing to the thickness and length of the original sheet bar will give the required gauge. During the finishing passes the roller, or his helper, operates the screw which regulates the distance between the finishing rolls. The quality of the product depends very largely on the roller's skill in handling material and men, a skill which usually has been gained through long experience in the mill, by working up from the lower positions. The actual work performed by him is very rapid and done under conditions of great heat. The rolling-crew positions (roller, heater, rougher, catcher, matcher, and doubler) are usually filled by men of unusual strength and endurance, as the work is heavy and often done in high temperatures. Men in these positions usually have resting periods at frequent intervals. Many mills are equipped with water-cooled furnaces, fans or cold-air blasts where the men work, and, in some instances, with water-cooled floors, to relieve heat conditions.

*Engineer.*—Has charge of the engine furnishing motive power for the hot mills. A skilled, stationary engineer.

*Dragger.*—Drags finished packs from the finishing pass of the rolls across the cooling floor to the shears. This work is usually done by the doubler and catcher, with a helper when handling the heavier packs. This helper also assists the shearman. Heavy manual labor, unskilled, handling hot material.

*Shearman and Shearman's helper (Leader, Shear hold-up).*—The finished packs are brought from the finishing rolls by the doubler, catcher, or dragger and are squared and cut into proper size by the shearman and his helper. They work together in handling the packs, but the shearman is responsible for their proper cutting. The work is quite heavy, with rest periods varying according to the percentage of the production sheared. The shearman is a skilled employee; his helper unskilled and training for the higher position.

*Scrap man.*—Picks up scrap sheared from sheets and wires into bundles or places it in pans or boxes. Also in some places wheels bundles to scrap platform and loads on cars. A hydraulic press is sometimes used to press the scrap into bales or bundles, the operator being known as a bundler. Bundles from the hydraulic press are usually transferred to the cars by a magnet crane. The work is light manual labor and unskilled. There is some danger of injury by material falling from cranes and from cutting the hands and fingers while handling scrap.

*Opener.*—After the packs have been sheared the opener tears the sheets apart with specially shaped tongs. Difficult ones (stickers) are thrown aside for the special "sticker opener," who uses tongs and a heavy sword. Semiskilled work, heavy and continuous, necessitating the keeping of the body in a bent-over position almost constantly.

*Leveler, first (Cold-roller, Roller leveler).*—After the sheets have been sheared and opened the leveler feeds them one at a time into the leveling machine, which consists

of a series of small rolls one above the other, to make a level and smooth surface. Moderately heavy work, requiring but little skill or experience.

*Leveler, second (Cold-roller catcher).*—Takes sheets from back of machine, piles in bundles on truck and stencils sheets. The bundles are carried away by a crane. Unskilled, moderately heavy, and continuous work.

*Annealer.*—Directs the charging and drawing of annealing boxes from the furnaces, sees that boxes are properly sealed, and regulates the gas flow to maintain the proper temperature. The work is largely supervisory, requiring a man with practical experience.

*Annealer fireman.*—When the annealing furnaces are heated by coke, the fireman tends the furnace fires. Moderately heavy, unskilled manual labor.

*Annealing floor man (Loader, Box annealing helper).*—Loads sheets on platforms of annealing boxes, covers sheets and seals for annealing furnaces. After boxes are drawn from furnaces, removes box covers, unloads and weighs sheets and delivers them to the galvanizing department or ties into bundles for stock. Moderately heavy, unskilled, manual labor.

*Stretcher man and Stretcher man's helper.*—Steel sheets are placed on the stretching machine by the stretcher man, his helper, and a stretcher laborer. The ends of the sheets are fastened in clamps of the machine which pull in opposite directions by hydraulic pressure and straighten all bent places in the sheet. The stretcher man has charge of the machine and operates the lever controlling it. The work is not heavy and requires but little skill or experience.

*Grease man.*—The grease from rolls and machinery is collected and carried to the grease house by laborers, where it is boiled, cleaned, and separated from water by the grease man. The work is comparatively easy, but somewhat disagreeable on account of the smoke and odor from the boiling tanks.

*Grease man's helper.*—Delivers oil from grease house to mill. Unskilled, light manual labor.

#### GALVANIZING.

*Cage loader (Stocker, Laborer).*—Places black sheets on cages or racks and hooks to crane, which carries sheets to the pickler. Unskilled, manual labor, requiring but little exertion, except when sheets are carried by hand instead of by crane.

*Pickler.*—To remove all scales immerses the sheet in a hot solution of sulphuric acid either "by hand," using short tongs to keep the sheets separated, or by operating a machine which has racks or cradles to hold the sheets, which must be completely separated so that the acid solution will wash the entire surface of both sides of the sheets. There is but little manual labor as the sheets are usually machine dipped, but some skill is required as the pickler must know when the scale is off and have the sheets removed at the proper time. The work is somewhat disagreeable on account of the acid fumes from the pickling solution.

*Cage unloader.*—Unloads cages, usually by a crane, after sheets have been pickled and carried to the feeder. In some places the picklers do this work. Unskilled, manual labor.

*Feeder.*—The sheets are placed in the rinsing trough by the cage unloader or pickler. The feeder pulls the sheets from the trough with tongs and starts them through the galvanizing machine by feeding into a pair of rolls which operate like a clothes wringer and dry the sheets before they enter the galvanizing bath. This work is sometimes done by the potman. Light work, unskilled, with some exposure to fumes of galvanizing bath. Feeders usually are promoted to potmen.

*Potman.*—The galvanizing machine is practically automatic. The sheets are started through it by the feeder and come out at the opposite end galvanized. In its course through the machine a sheet passes through the spelter or galvanizing liquid, through rolls which remove excess galvanizing material, and through a hot blast that dries it before it falls upon the chain conveyor which carries it from the machine. The potman puts the spelter into the galvanizing pots and regulates the flow of gas to make

the proper heat. There is but little manual labor connected with the position except when cleaning pots at the end of each week, but an experienced man is required. The fumes from the spelter bath are strong and disagreeable, causing vomiting and sickness in some instances.

*Galvanizing fireman.*—When galvanizing pots are heated by coke instead of gas, the fireman tends the fires. Coke is brought to the pots by an unskilled laborer. Light work, practically unskilled.

*Inspector.*—The inspector is a laborer who examines the sheets on both sides after they have been galvanized, placing the primes on the cooling rack or on trucks and throwing the wasters out to be rerun. This work is sometimes performed by the potman. It is continuous, light manual labor, and skilled to the extent that the inspector must be able to detect sheets that are not properly galvanized. When heavy sheets are being run, an unskilled laborer assists in handling the sheets.

*Bundler and Bundler's helper.*—Metal strips or ties are laid on the bundling rack and several sheets are piled on them. The strips are then bent around the sides of the pile and over the top with a hammer, which ties the sheets into bundles. The bundler and the helper work together and do the same kind of work, which is moderately heavy, continuous, and unskilled.

*Laborer (Cleaner).*—Delivers spelter to galvanizing machine, carries wasters to pots or scrap pile, and does general cleaning around shop. Unskilled, light manual labor.

#### CORRUGATING.

*Paint-machine feeder.*—Feeds sheets into machine where they pass between a series of rolls which are automatically covered with paint. Painted sheets come out at back of rolls, fall on conveyor chains, and are carried to drying racks. Light manual labor, requiring little skill.

*Paint-machine laborer.*—Picks sheets from conveyor chain back of paint machine and places in drying racks. Continuous manual labor, involving the handling of freshly painted sheets; rapid work while machine is operating; unskilled.

*Corrugator.*—Has charge of corrugating machine and men employed around it. Is responsible for size of corrugations. Sets machine as necessary. Feeds sheets into machine, several at one time. Light manual labor.

*Corrugator's helper.*—Assists in feeding sheets into corrugating machine. Also stencils sheets before feeding into machine.

*Bundler.*—Takes sheets from machine, piles and ties into bundles; also wheels trucks of bundles away, though this is sometimes done by crane. Continuous work.

*Laborer.*—Sweeps floors, does general cleaning up, picks up scrap, etc. Diversified work, both as to difficulty and condition under which done.

*Shipping-room laborer.*—Puts sheets into cars for shipment and handles sheets in stock room. Moderate, unskilled, manual labor.

#### TIN AND TERNE PLATE MILLS.

*Craneman.*—(Same description as for Craneman, Sheet mills.)

*Stocker.*—(Same description as for Stocker, Sheet mills.)

*Heater and Heater's helper.*—Fire and regulate the sheet furnace and keep grate bars clean. Receive the pairs of sheets after first rolling by rougher, charge them into furnace, reheat, remove, and deliver to roller for second rolling. Receive doubled sheets from doubler or his helper after doubling and shearing, charge and reheat and deliver to rougher for third rolling. Receive sheets from doubler or his helper after redoubling, charge into furnace and reheat and deliver to roller for fourth rolling and finishing. Hard manual labor requiring sturdy physique and skill in handling and heat treating the sheets in their different stages of manufacture, first as a pair of sheets rolled together, then as four sheets after first doubling, and again the short pack of eight sheets after redoubling. These men spell each other at certain stages, and at others work together.

*Doubler and Doubler's helper.*—Fire the pair-heating furnace and keep the grate bars clean, and, assisted by the screw boy, charge and superintend the heating of tin bar in this furnace. After two sheets have been rolled together they open them with tongs, match and double them over, place in press and flatten the fold, then shear and trim the rough end and deliver to heater or heater's helper. Again after the doubled sheets have been rolled they open them up and double a second time and deliver again to the heater or heater's helper. Requires some knowledge of heating steel, quick and accurate handling of the sheets in opening and doubling them, and care in shearing. The doubler and helper perform the same work and alternate with each other either at stated intervals or after handling a certain number of pairs.

*Rougher.*—The rougher works at the front of rolls and the catcher at the back. A pair of heated tin bars is delivered to the rougher by the doubler or his helper and the two bars given in succession several passes through the rolls and then laid one on top of the other and given one or more passes, the catcher in each instance returning them over the top roll. After the last of these passes the rougher delivers the pair to the heater or his helper, who puts it in the sheet furnace and reheats. A number of pairs are given this preliminary rolling and charged in the sheet furnace. The next rolling is done by the roller. After this second rolling, and doubling and reheating, the heater or his helper returns the sheets to the rougher for a third rolling. The rougher again delivers the sheets to the doubler or his helper for redoubling and heating, after which they are given the finishing passes by the roller. The rapid handling of tin bars and sheets requires constant attention and a knowledge of rolling nearly equal to that of the roller himself. The rougher determines whether the pairs brought to him are properly heated and rejects them if they appear unequally and improperly heated.

*Catcher and Catcher's helper.*—The catcher and his helper perform the same duties, alternating with each other. They catch the bars or sheets when passed through by the rougher or the roller, lift them and pass them back over the top of the rolls, and when finished make a neat pile of the packs ready for transfer to pack shears. The work is done, of course, at the same relative speed as that of the men at front of rolls, with the additional labor required to lift the material to top of rolls and to remove and pile finished packs.

*Screw boy.*—The screw boy assists the doubler or doubler's helper in charging the pair-heating furnace with tin bar. He operates the screw which regulates the distance between the rolls during the rolling of the bars and of the pair after being heated in the sheet furnace, pulls the pair off the rolls and delivers to doubler or doubler's helper for doubling. Operates the screw again during the rolling of the doubled sheets. Moderately light, but very rapid work, with a rest period during the time the roller makes the finishing passes and operates the screw himself.

*Roller.*—The roller alternates with the rougher, doing the second rolling when two sheets are being rolled, and giving the finishing passes to the pack of eight sheets, the fourth rolling of the steel. The sheets are passed through the rolls, caught by the catcher or his helper, and returned over the top of the roll. During the finishing passes the roller himself operates the screw which regulates the distance between the rolls and the gauge of the product. He gauges the length with a steel measuring rod and notifies the catcher when the sheets are finished. The roller is the practical foreman in charge of a hot-mill unit, which consists of furnaces and set of hot rolls, and of the operating crew. The work requires much skill and experience in handling materials and crew, gained usually by working up through the lower positions. The actual work of rolling is about evenly divided between the roller and his rougher. The material passes through four stages of heating and rolling, the roller usually working the metal during the second and fourth stages. The roller is held responsible for the successful operation and working condition of his mill and the quality of the product. His attention is required constantly. The work is performed at high speed.



*Shearman and Shearman's helper.*—The shearman squares and trims the packs to a specified size. In order to supply himself with sufficient work he usually shears the product from three eight-hour turns on one mill. The helper assists in placing the packs on the shear table and in removing and piling them when sheared. He also takes away the scrap and throws it into the scrap pit. Moderately heavy manual labor, continuous during a turn, and requiring considerable attention at all times to get the maximum weight of finished sheets of specified size.

*Craneman.*—Operates small crane moving sheets and packs from rolls to shears, from shears to openers, from openers to picklers, etc. Light work, requiring but little experience.

*Crane hooker (Crane follower).*—Signals craneman and hooks crane chains to material to be moved. Semiskilled, manual labor.

*Opener.*—The packs (each containing eight sheets rolled together) having been sheared and cut in two or more pieces, each piece of which contains eight sheets, must be separated for further treatment. They are placed on benches in the opening department and there opened by men or women. The packs are first bent at one corner and piled edge up on the benches. The opener then grasps a pack of eight sheets and, wearing a glove with block of lead fastened inside, strikes these corners, opening as a rule one sheet at a time. The opener then tears them apart and piles them flat with the opening corners matched. Sheets difficult to open are laid aside and usually opened by "sticker openers." The work is light, continuous during the turn, and requires great dexterity.

*Pickler.*—After the packs are opened, the sheets are subjected to a bath of hot sulphuric acid, or black pickle, to remove all scale and oxide from their surface. The picklers arrange the plates in a crate which is then picked up and deposited in the acid bath by a machine or, in establishments where sheets are pickled by hand, they arrange the sheets in vats and cover them with acid. The pickling machine moves the crate up and down so that the acid may come in contact with every part of the plate, while in hand pickling the picklers use short tongs with which rapidly to separate the sheets so that the acid may get to the surface of all of them. After pickling, the sheets are washed in a similar manner in water. Sheets also are pickled after the second annealing (white pickling), but in a weaker solution of acid.

*Packer.*—After sheets have been pickled they are removed from the crates and packed on the annealing bottoms by the packers, covered over, sealed, and carried to the annealing furnaces. Unskilled, moderately heavy, manual labor.

*Annealer.*—(Same description as for Annealer, Sheet mills.)

*Annealer fireman.*—(Same description as for Annealer fireman, Sheet mills.)

*Cold opener.*—After the sheets come from the annealing furnaces they are stuck together and must be separated. This is done by the cold opener, whose work is similar to that of the opener behind the shears, but easier.

*Cold roller, Rougher, and Catcher.*—After the sheets have been annealed and opened, they are passed cold through rolls (cold rolling) to give a perfectly smooth surface in order that the finished plate will have a high polish. The sheets are passed through the rolls by the rougher and catcher, the roller having charge of several stands of rolls and supervising the work. The work is light and requires but little skill or experience, except for the roller, who is responsible for the proper setting of the rolls and the finish of the sheets.

*Greaser.*—Greases roll trains in mill. Unskilled, light work.

*Tinner.*—After the sheets have been opened, black pickled, annealed, cold rolled, annealed again, and white pickled, they are removed to the tin house. The tinner, standing in front of the tinning machine, takes the sheets one at a time and feeds them downward into the machine which contains the molten tin covered with palm oil. The sheets pass through several sets of rolls, which distribute the tin evenly, the last set squeezing off the surplus tin. As the sheets come from the tinning machine they

fall upon a conveyer which carries them to the branners. Light and continuous work requiring considerable dexterity in handling and feeding the sheets. The tinner also puts the tinning material in the machine, keeps his own fire, and cleans up at the end of each week.

*Redipper*.—When terneplate is made the tinning machine contains a mixture of tin and lead running about 25 per cent tin and 75 per cent lead. As the plate comes from the tinning machine it is received by the redipper, who immediately dips it into another bath of terne mixture and feeds it down into a tank of palm oil through two or three rolls that revolve at the top of the compartment. Light and continuous work, semiskilled.

*Riser*.—When the terneplate is fed down into the palm oil by the redipper, the riser by means of a hook starts it upward again, and as it appears between the second and third revolving rolls, receives and places it on a rack. Light and steady continuous work, and usually done rapidly.

*Branner*.—Lower-grade plates come from the tinning machine on a conveyer that feeds them automatically into the branning machine. This machine consists of a series of revolving brushes which apply bran or a mixture of sawdust and lime to the surface of the plates to remove the palm oil that adheres to them. The highest grades of plates are branned by hand, two branners working behind each tinning machine. The first takes the plate and works it back and forth in bran in the shallow box on the table before him and then places it in a rack in reach of the second branner who performs the same operation again, after which a "duster" wipes off with a soft sheepskin the bran dust that remains on the plate. Sometimes the branners both bran and dust the plates. The work is light and requires but little skill to tend machines or to bran by hand.

*Truckers*.—Where plates are not carried by a crane from the branners to the assorting room, they are loaded on trucks and pushed to the assorting tables by truckers. Moderately heavy, unskilled labor.

*Assorter*.—Assorters are usually females. The finished tin plate is placed on a bench in front of the assorter who quickly lifts each sheet, estimates the weight, and examines it on each side for flaws and improper coating. Assorters throw the sheets usually into four or more piles—those that are defective in one pile and those that are perfect in other piles, as are determined by their skill in estimating the slight differences in weight. The work requires very quick hands and eyes, and great skill in determining weight. In mills where the assorters have to remove the assorted tin the work is heavy.

*Mender scraper*.—Smooths rough spots on tin sheets to be retinned, using a steel scraper. Semiskilled, light work.

*Stamper*.—Terneplates and some tin plates are stamped with customers' or manufacturers' private brands. This work is done by a stamper on a small press. Light machine work, continuous, unskilled.

*Slitter*.—Operates a rotary gang slitter which cuts plates into smaller sizes than worked in the tin house. The slitter feeds the plates into the machine and carries them away after being cut. Unskilled, light manual labor.

*Reckoner*.—Tin plate is sold by the base box, consisting of 112 sheets 14 inches wide by 20 inches long. Plates of any size are usually packed 112 sheets to the box. However, some plates, on account of size and gauge, are packed 56 sheets to the box. The reckoner counts the sheets from the tables, weighs them, and checks the weight. Unskilled labor, requiring quickness and accuracy in counting.

*Tissue packer*.—High-grade plates are packed with tissue paper between the plates. This work is done usually by girls.

*Boxer*.—Places plates in wooden boxes, places slats over tops, and nails shut for shipment.

*Shipping laborer*.—Wheels boxes of plates into cars and piles for shipment. Unskilled, manual labor.

